AMERICAN
JOURNAL OF INSANITY.
APRIL, 1893.

ADJUNCTS TO MEDICAL TREATMENT IN HOSPITALS FOR THE INSANE.*

BY M. J. WHITE, M. D.,
Medical Superintendent, Milwaukee Hospital for Insane, Wauwatosa, Wis.

Within but a comparatively recent period has the subject of the care and treatment of the unfortunate victims of mental disease been given due consideration with reference to the various auxiliary measures to be employed in promoting a return to normal conditions in curable cases presented for treatment, and the amelioration of the larger class capable of enjoying a partial state of usefulness in the world. In reviewing the history of the treatment of the insane prior to the last decade, the lack of the governing principle calculated to meet the conditions presented on a rationally physiological basis will, in the light of subsequent experience, appear prominently to view. It is not my purpose to indulge in a retrospect of the conditions met with in the remote history of this peculiar class, when the affection occupied a somewhat novel position in the estimation of the profession and the laity; before it was accredited a morbid condition or disease and when the sufferers were subjected to indignity and ostracism.

To begin with the period when the insane were regarded as other invalids, suffering from an essential disease, it will be observed that the heroic measures adopted for their relief, consisting of abstraction of blood, blistering, violent purgation and the use of depletives and depressants, were duly supplanted by the more rational principles of rest and freedom from exciting influences, with tonics, good feeding, induction of sleep and occasional diversions of a suitable character; what was termed the expectant plan of treatment. This system of treatment of the insane obtained a foothold which has never been abandoned.

* Read at the annual State Conference of Charities and Correction, held at Madison, Wis., March, 1893.

The value of these principles as applied to the average case has been amply demonstrated. However, it was not sufficiently taken into account that, in a large proportion of cases met with, the person affected would seem to demand everything in the way of incentives to save him from the current of morbid reflection which was for a long period threatening to carry him off his feet, so to speak, and that the habit of morbid introspection, so common in cases presented for treatment, was to be combated. It was deemed sufficient to place the patient in surroundings thought to suit his condition, so far as rest and quiet were concerned, and to institute the administration of medicines calculated to improve the general nutrition and induce sleep: measures tending to arouse and stimulate a return to natural and healthful conditions of mind were, it is to be regretted, sadly ignored. The convalescence was undoubtedly retarded beyond what would be expected to be a reasonable duration, and cases lapsing into dementia were unduly hastened toward that goal. I would not wish to be understood as criticising unfavorably the methods practiced in the past history of the insane by the many noble, self-sacrificing and eminently able men who have devoted themselves and their abilities to the cause of these unfortunate people. All honor to them! The foundation of the principles inculcated by them in their students and followers has been richly operative in producing beneficent results in the humane and advanced practice in vogue at the present time. They were the pioneers in the struggle for the advancement of the welfare of the afflicted ones and they held the essential principle of humane and scientific treatment, as opposed to simply custodial measures, as paramount, and their individuality and teachings have borne fruit in the younger generation of alienists. The principle of rest and quiet and freedom from mental exertion was the key-note of the doctrine then advocated and no one will dispute its validity as applied to the average case of acute disease; it had its origin in a scientific observance of the principles of physiology, psychology and mental hygiene and its advocates were of such strength and possessed such powerful individuality as to insure the intelligent and efficient carrying out of their theories and the perpetuation of their practice; and with what beneficent results the condition of the insane at the present time will fully demonstrate. This theory and practice is as necessary and as effective to-day as in the past, and there is little likelihood of its being

superseded by any other, unless perchance the discovery of some potent substance tending to check or render impossible cerebral degeneration, or to renew inert nerve cells and replace effete nerve substance, shall revolutionize the methods at present practiced. The theory of rest to the overworked brain with its attendant derangement of functionation was based on the same principles and as faithfully practiced as those applying to the purely physical system. The comparison of a fracture in the osseous system with that of the disordered brain has been duly emphasized in the past by workers in the field of practical psychiatry and the deductions drawn have met with unanimous concurrence. Placing the brain in splints, so to speak, by the enforcement of absolute rest and quiet and immunity from distraction of any kind is the essence of the doctrine. This practice in the average case of acute mania is undeniably the correct and only proper one to be adopted with a view to bringing about a return to normal conditions of thought, feeling and action. In the average case of acute melancholia, however, I am doubtful of the efficacy of such a practice alone. My experience, though limited in comparison with some observers, forces upon me the conviction of the necessity of practice of an opposite character. The average case of melancholia, in my opinion, requires not so much rest and seclusion from conditions in the outside world which, in part, no doubt, were instrumental in causing the morbid condition presented, as the employment of methods calculated to wean the mind from pet fancies and gloomy imaginings and forebodings and divert it into healthful channels of thought.

It will be seen, therefore, that the principles laid down will not apply equally in all cases, intelligent discrimination being required and a study of individual peculiarities of disposition, habit and thought called for and suitable measures instituted to meet them.

I would say that while I am a believer in the somatic or physical theory of insanity and consider that in a large proportion of cases there is an interdependence of physical and mental conditions, yet my experience leads me to believe that while any physical derangement in the insane should receive the closest attention and active measures looking to its correction equally with the sane, and any possible connection between the two conditions in their relation of cause and effect should be given the deepest study and investigation, nevertheless, I am convinced

that, aside from the ordinary tonic and hygienic measures employed, the moral treatment of the insane is of still greater importance. It is readily recognizable that one of the earliest evidences of mental aberration is usually a perversion of the moral nature in greater or less degree, manifesting itself in a lack of power in the individual of adjusting himself to ordinary conditions and associations, absence of altruistic feeling, incorrect or exaggerated conception of passing events as applied to themselves, disregard of the proprieties and amenities of life and final absorption in self and the things of self. This condition is met with in the daily experience of every practical alienist and is of necessity to be antagonized by suitable measures not within the province of strictly medicinal treatment: consequently, what is termed the moral treatment of the insane is called into play with the hope of correcting the obliquities presented. Very little is to be hoped for, in my opinion, from simply and solely medicinal treatment: the environment and moral atmosphere of the insane as produced by the example of their nurses and others in charge is most powerful: this in conjunction with the various auxiliary measures in use, such as healthful occupation of the body and mind of a not too stimulating kind, a salutary amount of amusement and diversion of a like character, both adjusted to the mental balance of the individual, will be found most effective in restoring normal mental and moral tone. The effect of environment on the insane is apparent to the average observer and in greater degree to those in close and daily contact and intercourse with them; in the early days this fact did not seem to be recognized in any material degree and consequently was not taken due advantage of in the accessories of their care. The present appearance of homelikeness and cheer sought to be attained, and which presents in the average modern institution in its exterior and interior arrangements, bears witness to the change of sentiment wrought by the lessons of experience. The gloomy and forbidding structures with cold, bare exterior, devoid of lines suggesting anything in the shape of a home, and everything calculated to impress the idea of custody and duress has gradually given place to cheerful, sunshiny abodes with every accessory tending to appeal to the sense of the beautiful and good. These are in turn being superseded, or at least modified, by the addition of cottages for the reception respectively of the milder types, newcomers as well as the various classes which con-

stitute a source of annoyance and menace to their fellows in affliction: another step which marks the advance in modern psychiatry and to its perpetual credit. These institutions on the plan of segregation, tending to the ultimate abandonment of that of herding the insane in large caravansaries, are proving a veritable boon to both classes and particularly the more sensitive class of acute cases in which first impressions are most potent for good or evil. Again, by these means, and in large congregate institutions steps have been gradually taken looking to a more perfect classification of these afflicted people and wherever attained it has wrought incalculable good. The entire separation of the defective classes, together with that most objectionable class from every standpoint of safety and comfort to the large mass of the insane, the epileptic, is being sought and attained in a limited number of the States and measures looking to the accomplishment of that end are being introduced in our own State at the present time in this line of progressive sentiment which, it is to be sincerely hoped, will meet with success. It will assuredly prove a perpetual source of pride and satisfaction to its promoters.

To return to my theme, the seeming digression from which you will pardon, the congregating of large numbers of the insane in surroundings however attractive, and however much effort was exerted to vary the monotony of daily routine, the condition of turbulence, discontent and vain importuning on the one hand and that of hopeless resignation, apathy and dejection on the other, was the picture daily presented to view.

The disuse of mechanical restraint in varying degree and wholly marks another step in the progress attained, and however conflicting may be the opinions entertained as to the benefits or the contrary resulting from its partial employment or entire abolition, it is not in the province of this paper to discuss.

This brings us to the period when the insane were still regarded as incapable of any intelligent or organized effort: the fear of trusting them with the use of implements of any kind also playing an important part. They were treated as absolutely invalid physically as well as mentally and suffered to languish in idleness. As a first step in the right direction, their assistance was sought in the performance of ordinary household tasks to their decided benefit mentally, morally and physically: next in the line of progressive sentiment they were persuaded and encouraged to assist in the

various trades suited to their abilities and tastes and with what satisfactory results the records and statistics of the average modern institution of to-day will furnish ample evidence. This movement of organized labor among the insane, modest and trifling in its inception, has steadily and gradually been pushed to the utmost limit of good and has finally become an established and successful adjunct to the ordinary means of treatment employed. Its origin and development was based on the theory of prolonged disuse of a faculty resulting in inertia and ultimate decay, as applied to the curable or partially curable cases, as well as in the idea of possible elevation of the condition of the mass of so-called incurable cases: the filthy, destructive and turbulent. As stated, the results of this practice have far exceeded the most sanguine expectations entertained in the way of success. Out of conditions of turbulence, unrest and painful dejection have come a spirit of contentment, quiet and renewed hope. The basis of this plan as an adjunct to the ordinary line of treatment pursued for the relief of these unfortunate people is assuredly grounded in the soil of common sense, judgment and humanity. It will be readily appreciated that voluntary idleness is most pernicious in the average sane individual and productive of discontent, mischief and general moral deterioration: then how much greater in degree will these results be manifest in the insane in a state of enforced idleness? It is only necessary to visit and compare institutions where the two conditions do not obtain uniformly to appreciate the *rationale* of the plan as applied to the insane. The old proverb "Satan finds some mischief still for idle hands to do" could never be more aptly quoted than with reference to the average insane person kept in that state. It is a fact universally established in the minds of close observers of this diseased condition that in a large proportion of cases presented, an excess of energy of a physical nature is constantly being generated and evolved, and that, if an outlet is not provided for it in natural channels, explosions are certain to occur periodically in the form of assaults, provoked or the contrary, on their fellows: again, in the insane, equally if not to a greater degree, the conditions favorable to restful repose at night are to be met by the application of measures calculated to produce a mild degree of bodily fatigue, such as active exercise or employment or both in the open air, suited to the character of the individual as to strength, temperament and habit. It is a most gratifying

accomplishment to behold the success of such measures as contrasted with those of former times when the unfortunates were restricted in their movements, with the possible exception of daily walks; and the surplus energy evolved expended itself during the night in motor restlessness, vociferation and endeavors to render night hideous and the abode repulsive to those within hearing. This condition of sleeplessness and unrest was and is at present, to a considerable extent, met by the administration of sedatives and hypnotics whereby the nervous energy is suppressed perforce: not in the average insane person, however, without dire effects being produced eventually, as evidenced by the miserable appearance of the victims of this system of artificial sleep. The same conditions are being overcome to a daily increasing extent by the employment of more rational methods, namely, relying upon the exhaustion produced by healthful exercise and manual labor in the open air during the day, and the administration of hot milk or lemonade at intervals, when demanded, during the night. For those unequal to the tax on the physical strength and those disinclined and absolutely resistive to such means, passive exercise, as furnished in the course of the Turkish bath, is employed with immense advantage to the individual.

The heat and sudation has been found to be most healthful and calmative to the highly overwrought brain and nervous system, equalizing the circulation and thereby relieving internal congestion; promoting tissue transformation and incidentally the assimilation of foods; ridding the system of effete material; also constituting a general nerve sedative and hypnotic of a natural character, thus taking almost, if not entirely, the place of the various harmful drugs employed to accomplish the same purpose. This measure, as an adjunct to the ordinary medical and moral treatment pursued in the Milwaukee Hospital for Insane, together with administration of hot milk at night, has rendered possible a reduction in the number of sedative draughts amounting to fifty per cent; and the record of sleeping draughts is practically nothing, averaging two doses per night. Due credit must, however, be accorded to the effect produced by the extended degree to which occupation in the way of farm work for the physically robust and the mat and other industries for the weaker class have been carried. The results secured in the way of improved nutrition, with its attendant advantages of quiet and contentment,

more than counterbalance, in my opinion, the effort demanded to bring it about.

Again, it is my firm conviction that due advantage has not been taken of appeals to the special senses in the treatment of the insane; for example, music as an adjunct, intelligently and scientifically employed, has, by close observers, been found to possess really wonderful potency in its effects on the troubled and clouded intellect.

In the nature of the disease, involving, as it does, the faculties of perception and the emotions, which while blunted in some and existing only as a potentiality in others, yet in the large majority appear in an exaggerated degree of activity, judicious appeals to and stimulation of them would naturally be supposed to yield very material and satisfactory results. The love of music is an entity in the make-up of the ordinary being and will inevitably reveal itself when reached by harmony of sound, however produced; and how readily are the attributes of mind stimulated to action: consciousness aroused by experiencing a healthful shock, so to speak; memory revived, the emotions appealed to and the general mental operations quickened into activity. The same *rationale* applies in a great measure to the victims of mental disease and with equal if not greater force.

The sense of sight as a channel to the mind is being appealed to also by the use of sunlight in its full intensity, and the employment of vari-colored and attractive objects. Experiments in the field of hypnotism recently made indicate the extent to which this agency has been employed and with what results. It is found conclusively that these means of stimulating the mind through the medium of the special senses are of very material value and, in conjunction with others more purely medical, result in a re-establishment, partially at least, of functional activity. The measure of success attending the efforts of those who have for a considerable period past urged and promoted this practice of occupation for the mind diseased by various devices is of such magnitude as to warrant continued and persistent application of it, as well as further experimentation with any and all methods calculated to restore, in part at least, mental activity in brains structurally damaged and limit the degree of mental deterioration by an endeavor to re-educate the crippled faculties.

Finally, the effect of association of the various classes of the

insane for short periods daily, as accomplished by the recent introduction, to a limited extent, of the congregate plan of dining-rooms in institutions is being turned to account for the benefit of all classes. This system has very recently been instituted in the Milwaukee Hospital for the Insane and has proven eminently successful; the results in the way of improvement in the manners and deportment and the general elevating influence operative is clearly appreciable.

It will be observed that the various adjuncts employed in the treatment of the insane which have been briefly reviewed in this paper have for their object: first, the re-establishing of healthful and natural lines of thought, feeling and action, so far as is possible, due account being taken of the character and temperament of the individual sought to be reached by them: and, secondly, securing the closest approach to ordinary conditions of life formerly enjoyed in the outside world.

The counterfeiting of these conditions in their applicability to the insane will be seen to constitute the essence of the doctrine advocated in this paper and the *rationale* of the method, based as it is on conditions of mind in health and in disease, and adopted and practiced in the average modern institution, assuredly commends itself to extended study and observation on our part in view of the accomplishment of further good to this unfortunate class of our fellow-beings.

TRIONAL AND TETRONAL.

CLINICAL OBSERVATIONS ON THEIR ACTION AS HYPNOTICS AND SEDATIVES FOR THE INSANE.

BY WM. MABON, M. D.,

First Assistant Physician at the Utica State Hospital, Utica, N. Y.

So far as known to the writer, no American observer has as yet recorded his experience with trional and tetronal, which are the latest claimants for recognition as hypnotics and sedatives for the insane.

The disulphones, to which these two new remedies belong, are said to depend for their physiological activity upon the ethyl groups and their hypnotic action is increased with the number of such groups. Trional (diethyl-sulfonmethylethylmethane) has three, and tetronal (diethyl-sulfondiethylmethane) four ethyl groups. They both have a slightly bitter taste and do not dissolve well in water at an ordinary temperature, although they are soluble in boiling water and, to a certain extent, in alcohol and ether. By reason of this partial insolubility they have generally been administered, finely powdered, in hot gruel, hot milk or beef tea. They have been reported favorably by Boettiger, Schultze, Schaefer, Ramoni, Barth and Rumpel and Garnier, and are said by these observers to be more active than sulfonal (which also belongs to the disulphones and contains two ethyl groups) as shown by the fact that the patient is affected more promptly, awakens readily and does not exhibit many unpleasant after effects. It is claimed that they have besides a hypnotic effect, a decidedly sedative action, and it has been found possible to keep quiet during the daytime many noisy, excitable and destructive patients. Tetronal is said to have a more decided sedative action than trional, while the latter acts better in the sleeplessness of neurasthenia and organic brain affections. Hypnosis lasts from six to eight hours and is not accompanied by dreams. Trional costs but little more than sulfonal, whilst tetronal is twice as expensive.

In the observations made it was found that the insolubility of these remedies prevented in two instances their satisfactory administration and so these cases are not recorded. They were

patients who were fully controlled by delusions of persecution, and were suspicious of all about them, and in giving the hypnotics mixed with food the slightly bitter taste imparted to it gave rise to ideas of poisoning.

TRIONAL.—The hypnotic action of trional was noted in the following cases:

Case 1. Female, age 65, form of insanity, acute melancholia. On February 19th thirty grains (grammes 2) were administered, and in half an hour the patient went to sleep and slept for nine hours. On the following night fifteen grains (gramme 1) were given, and the sleep which began in an hour continued eight hours. This patient formerly did not sleep well, but has rested quietly every night, since the second administration of the remedy, without the use of any medicine.

Case 2. Female, age 75, form of insanity, acute melancholia. On February 18th she was given thirty grains (grammes 2) and went to sleep in two hours. After resting an hour she awoke for a short time and then went to sleep again for five hours. The following morning she complained of feeling dizzy. February 19th, twenty grains (grammes 1.33) were given which was followed in two hours by sleep which lasted six and one-half hours. On February 20th trional was not employed and the effect of the dose given the night before was carried over and the patient slept six hours. February 21st, again the remedy was not given, but on this occasion the patient was awake and restless several times during the night. February 22d fifteen grains (gramme 1) were given, and the sleep, which resulted in an hour and a half, continued seven hours. With the exception of the first morning, no unpleasant after effects were noted.

Case 3. Female, age 34, form of insanity, sub-acute mania. On February 18th thirty grains (grammes 2) were administered and in an hour and a half the patient was asleep and remained so nine hours. On the following night the same quantity was given, after which patient went to sleep in an hour and slept for nine hours. On February 20th, patient slept well without its use. On February 21st, again it was omitted, but the patient did not rest well. On February 22d sleep was produced in an hour with fifteen grains (gramme 1), but she was restless during the night. February 24th twenty grains (grammes 1.33) were given and sleep, which resulted in an hour, continued for eight hours.

Case 4. Female, age 59, form of insanity, chronic mania. This patient received on four occasions doses of thirty grains (grammes 2) each, and the sleep which resulted in each instance began in half an hour and continued eight hours. Following the last dose she complained of slight nausea. Another effect noted was that the patient instead of being noisy and restless during the daytime, as was her custom, became quiet and orderly.

Case 5. Female, age 52, form of insanity, sub-acute melancholia. This woman generally slept well, but for two or three nights previous to the administration of trional, her sleep had been restless and broken. On February 8th she was given fifteen grains (gramme 1), went to sleep in fifty minutes and slept for six hours. Next morning she complained of still being sleepy. On February 19th, after taking ten grains (grammes .66), she went to sleep in thirty minutes and continued so for six and one-half hours. Medicine was then discontinued and she has rested well ever since.

Case 6. Female, age 29, form of insanity, acute mania. February 19th was given fifteen grains (gramme 1), the effects of which were produced in one hour and a half and continued for six hours. February 20th, after a dose of the same size, she went to sleep in forty-five minutes, and slept for seven hours. February 21st, with a similar quantity, sleep did not result for two hours and a half, but it continued eight hours. February 22d, twenty grains (grammes 1.33) were again given and the sleep which came in an hour and a half continued for seven hours. The drug, which was given for its hypnotic effect, also resulted in keeping this patient comparatively quiet during the daytime.

Case 7. Female, age 43, form of insanity, dementia. On February 18th, patient took fifteen grains (gramme 1), went to sleep in an hour and continued to rest for eight hours. February 19th, was again given fifteen grains (gramme 1), and the sleep which resulted in half an hour lasted nine hours. This patient was previously extremely noisy at night.

Case 8. Female, age 53, form of insanity, sub-acute melancholia. February 18th, was given thirty grains (grammes 2), went to sleep in fifty minutes and did not awaken until seven and one-half hours had passed. February 19th, after a similar dose, was asleep in thirty minutes and continued so for eight and a half hours. February 20th, was given fifteen grains (gramme 1), and the sleep which resulted in forty minutes continued for seven hours. Feb-

ruary 21st, was again given fifteen grains (gramme 1), went to sleep in forty minutes and slept for seven hours and a half. On the two following nights no hypnotic was given and she rested well the first night, but the second was restless and uneasy. This patient for several months had been unable to sleep without the use of either chloral or sulfonal.

Case 9. Female, age 37, form of insanity, acute mania. Fifteen grains (gramme 1) were given on the night of February 21st, after which the patient went to sleep in fifteen minutes and slept eight hours and a half. The same results were noted on the three following nights with the same dosage.

Case 10. Male, age 47, form of insanity, sub-acute melancholia. Trional was administered on one occasion in a dose of thirty grains (grammes 2), and the sleep which resulted inside of an hour continued for eight hours. On five nights, it was given in doses of fifteen grains (gramme 1) and produced each time eight hours of natural sleep, which commenced in forty-five minutes from the time of its administration. This patient had for a long time depended upon the use of sleep-producing remedies, and, after using trional, said that the sleep which the powders gave him seemed more natural than that produced by anything else he had ever taken.

SUMMARY.—In doses of ten grains (grammes .66) trional was given on two occasions; the sleep produced averaged seven hours, and the average time required to bring about sleep was thirty-five minutes. In fifteen grain (gramme 1) doses, it was given twenty-one times, required an average of fifty-eight minutes to produce sleep, and the average length of the hypnosis was seven and one-half hours. The shortest time which it took to produce sleep with this dosage was fifteen minutes, and the longest was two hours and a half. The shortest duration of sleep was six hours, and the longest nine hours. One dose of twenty grains (grammes 1.33) produced sleep in an hour which lasted eight hours. Thirty grains (grammes 2) were given eleven times, which produced sleep in an average of an hour, and continued for an average of eight hours. The shortest time which it took to produce its effects was thirty minutes, and the longest two hours. The shortest duration was five hours and the longest nine hours. It was given in all on thirty-five occasions and produced an average sleep of nearly eight hours in an average time of fifty-eight minutes.

Besides its hypnotic effect on these patients it produced a quieting effect the next day on two cases. In addition, in three patients its action seemed to be carried over until the following night and caused these cases to sleep well without any hypnotic. The quality of sleep produced was, save in one or two instances, quiet and restful, and, with the following exceptions, was not followed by unpleasant after effects. One patient was sleepy the following day, one complained of nausea, and another appeared dizzy.

The next series of cases recorded comprises those in which trional was used as a sedative:

Case 1. Female, age 37, form of insanity, chronic mania. On February 19th the patient was given three doses of fifteen grains (gramme 1) each, which resulted in keeping her quiet all day long, but made her drowsy and languid. February 20th she was given fifteen grains (gramme 1) in the morning, and fifteen grains (gramme 1) in the afternoon, and on this day was quiet and self-controlled, but did not appear to be drowsy. On the next three days she was given each morning fifteen grains (gramme 1) with the most happy results. In this case marked hallucinations of hearing existed in addition to motor restlessness and the patient was decidedly destructive to furniture. By the use of this remedy we were enabled to keep her quiet without stupefying her except in the single instance noted.

Case 2. Female, age 45, form of insanity, chronic mania. On February 19th three single doses of fifteen grains (gramme 1) each were given and the patient remained quiet all day. She was, however, drowsy and said that her head was "so dizzy" that she could not walk straight; she slept all of the following night. On the three following days she received fifteen grains (gramme 1) each morning and evening with the effect of keeping her quiet and self-controlled, whereas she had been formerly extremely noisy and given to scolding most of the time.

Case 3. Female, age 50, form of insanity, chronic melancholia, accompanied with great agitation. On February 19th three doses of fifteen grains (gramme 1) did not affect her in the least. The next morning she was given thirty grains (grammes 2), went to sleep in fifteen minutes, and continued so for half an hour. After awakening, her speech was thick and her gait staggering; she slept all of the following night. On February 21st fifteen grains (gramme 1) were given, and she soon became rather stupid and

remained so until the afternoon, when she again became restless and agitated. At night she received another dose of fifteen grains (gramme 1) and slept quietly until morning. On the two following days two doses daily of fifteen grains (gramme 1) were administered with the result of quieting, but not stupefying her.

Case 4. Female, age 50, form of insanity, periodic mania. In this case the outbreak of excitement began February 19th and for two days efforts were made to administer the drug, but, owing to the patient's strong resistance, she did not at any one time receive the full dose of fifteen grains (gramme 1), and the quantity she did receive produced no apparent effect. On February 22d she took at noon fifteen grains (gramme 1) without effect, but in the evening the same size dose resulted in her remaining quiet all night. On the three following days she was given morning, noon and night, fifteen grain (gramme 1) doses, and, with the exception of being noisy for two hours one afternoon, was quiet and well behaved. After the last administration the excitement subsided and she has been ever since quiet and self-controlled.

Case 5. Female, age 36, form of insanity, *folie circulaire.* On February 20th at the beginning of a period of exaltation fifteen grains (gramme 1) were given morning, noon and night, but the patient did not give any evidence of being under the influence of the sedative until the afternoon, when she became drowsy and continued so for an hour. She was talkative and noisy all the following night. On February 21st and 22d single doses of fifteen grains (gramme 1) were given in the morning and evening, the excitement subsided, and she has been quiet and self-controlled ever since. In this case the patient had usually been disturbed for ten days or two weeks at a time, and further observations should be taken to see if the period of excitement in this class of patients can be shortened by the use of this remedy.

Case 6. Female, age 67, form of insanity, chronic mania. In this case the patient was extremely restless and excitable and for a long time had been violent and destructive. In two days she received seventy-five grains (grammes 5) in divided doses of fifteen grains (gramme 1) each, but with no result. The following day she was given thirty grains (grammes 2) in the morning, followed in three hours by another dose of the same size; these doses also failed to quiet her. The next day a single dose of forty-five

grains (grammes 3) was administered and she became quiet for two hours, although during that time she made an attempt to break the glass in a picture frame, but apparently did not have strength enough to accomplish her purpose. No further trial was made.

Case 7. Female, age 48, form of insanity, dementia. This dement was generally restless and occasionally became extremely disturbed for two or three days at a time. During one of her disturbed spells she was given ten grains (grammes .66) and remained quiet all day. The following morning she again became disturbed and a dose of the same size produced a similar result.

Case 8. Female, age 50, form of insanity, dementia. A similar case to 7. Was given the same number of and the same size doses, and the results were likewise most satisfactory.

Case 9. Female, age 33, form of insanity, dementia. This woman received on the mornings of February 24th and 25th doses of fifteen grains (gramme 1) each, with the result that she was quiet all of the first but only four hours of the second day.

Case 10. Female, age 30, form of insanity, chronic mania. On February 24th and 25th single doses of fifteen grains (gramme 1) were administered three times a day without very satisfactory results, the patient being either noisy or restless or else stupefied with the drug. Doses of ten grains (grammes .66) did not have any effect.

Case 11. Female, age 44, form of insanity, dementia. Doses of fifteen grains (gramme 1) were given on four occasions, but the effect did not last more than an hour each time. She was then given thirty grains (grammes 2), but the result was likewise unsatisfactory.

Case 12. Female, age 44, form of insanity, chronic mania. On the morning of February 19th fifteen grains (gramme 1) were given. In half an hour patient became quiet, an hour later was drowsy and continued so for three hours, she then became noisy, when fifteen grains (gramme 1) were given, after which she was quiet for three hours without being drowsy. She slept all night, but the next morning was noisy and turbulent. After this, doses of the same size were given four times in the course of two days and the patient was quiet for two hours after the administration of each dose.

Doses of fifteen grains (gramme 1) three times a day were given for seven days. On three occasions this dosage kept the patient

quiet all day, and four times no effect was produced. Similar doses were given twice a day for fourteen days and kept the patient quiet all day on nine occasions, quiet for three hours once, for two hours twice and for one hour twice. On the three occasions it was given in fifteen grain (gramme 1) doses once a day, the results were satisfactory twice and once no effect was produced. Doses of ten grains (gramme .66) each were given once a day for six days and the result was in each instance good, although the excitement in these cases was not so great as in those in which larger doses were given. Similar doses given twice on one day were satisfactory. When given three times a day to very disturbed patients no effect was produced. Doses of thirty grains (grammes 2) once a day, were satisfactory in one instance and a failure in another. When given to one patient twice a day in the same quantity, it was likewise unsatisfactory. A dose of forty grains (grammes 3) caused the patient to remain quiet only an hour.

The attack of excitement in the case of circular insanity, Case 5, was shortened. The other effects noted were in five instances, a drowsy state, in one the patient was dizzy and staggered, and in another the speech became thick and the gait staggering.

TETRONAL.—The following cases are those in which this drug was used as a hypnotic:

Case 1. Female, age 53, form of insanity, acute melancholia. February 24th ten grains (gramme .66) were given, and the sleep which resulted in an hour and a half continued for seven hours. February 25th a similar dose gave the same length of sleep as that on the preceding night, but the effects were observed in an hour. On February 26th ten grains (gramme .66) were again given, and the sleep which resulted in fifty-five minutes continued for seven hours. On February 27th the amount was reduced one-half, but the sleep which resulted in two hours continued for only two hours and was restless in character. On February 28th ten grains (gramme .66) produced in an hour and a quarter sleep which lasted six and one-half hours. The two following nights the dose was on each occasion ten grains (gramme .66) and in both instances sleep resulted in half an hour and continued for seven hours.

Case 2. Female, age 33, form of insanity, *folie circulaire*,

After having been in a comfortable mental condition for several months, this patient began to exhibit evidence of mental excitement, did not sleep well, became profane and was somewhat restless and noisy. On February 27th she was given ten grains (gramme .66), and in an hour went to sleep and slept for six and one-half hours. The following night ten grains (gramme .66) were given, but sleep did not occur for two hours and a half and lasted five and a quarter hours. On March 1st a similar dose produced sleep in an hour which continued seven hours.

Case 3. Female, age 44, form of insanity, dementia. February 25th five grains (gramme .33) were given, but the patient only obtained after an interval of four hours a restless sleep of three hours' duration. On the following night a dose of the same size produced exactly similar results. On February 27th and 28th she received nightly doses of ten grains (gramme .66), went to sleep in an hour and slept seven hours on each occasion.

Case 4. Female, age 52, form of insanity, chronic mania. February 27th ten grains (gramme .66) produced sleep in an hour which continued for eight hours. February 28th a similar dose required two and one-half hours to produce sleep, which lasted five hours. March 1st and 2d fifteen grain (gramme 1) doses were given, and the sleep in each instance resulted in half an hour and continued for eight hours. The day following the administration of the last dose the patient was drowsy.

Case 5. Female, age 49, form of insanity, dementia. February 26th ten grains (gramme .66) were given, and the sleep which took place only after four and one-half hours had passed, continued for seven hours. The two following nights with doses of the same size the results were similar. On March 1st fifteen grains (gramme 1) brought in an hour sleep which lasted nine hours.

Case 6. Female, age 75, form of insanity, acute melancholia. February 27th five grains (gramme .33) gave after three hours a sleep which lasted five and one-half hours. February 28th ten grains (gramme .66) produced sleep in two hours and continued seven hours, but it was restless in character. March 1st with a dose of fifteen grains (gramme 1) sleep resulted in half an hour and continued for eight hours.

SUMMARY.--Tetronal was given as a hypnotic on twenty-five occasions and produced in an average of one hour an average sleep of a little more than six hours. With five grain (gramme .33) doses

it required an average of three and a quarter hours to produce sleep, and the duration of hypnosis averaged only about three and one-half hours. With ten grain (gramme .66) doses, effects were noted on an average in an hour and fifteen minutes and continued on an average six and one-half hours. With fifteen grain (gramme 1) doses the average time to procure sleep was thirty-seven minutes, and the average duration was eight and one-quarter hours. From a study of these cases this drug does not appear to be effective in doses of less than ten (gramme .66) or fifteen grains (gramme 1) and, considering the price, sulfonal or trional would produce better results. Case 2, *folie circulaire*, appeared to be benefited by the use of this remedy. The only unpleasant after effect noted was a drowsiness in one instance on the following day. The sleep produced was, with the smallest dosage, rather restless and unsatisfactory.

The last cases noted are those in which tetronal was used as a sedative:

Case 1. Female, age 44, form of insanity, chronic mania. On February 25th and the three following mornings patient received five grain (gramme .33) doses, but was only quiet for two or three hours each day. On March 1st five grains (gramme .33) were given in the morning and five in the evening, but the effect was no better. On the next two days doses of ten grains (gramme .66) given in the morning caused the patient to remain quiet all day, and this condition was unaccompanied by drowsiness.

Case 2. Female, age 37, form of insanity, chronic melancholia. February 27th ten grains (gramme .66) were given in the morning, patient became quiet in an hour, and remained so all day but was rather stupid. February 28th five grains (gramme .66) were given in the morning and resulted in keeping the patient quiet all day, but no stupefying effect was produced. On the four following days similar doses were administered, and with one exception, when the patient was agitated and restless for three or four hours, the results were similar to those produced on the last mentioned date.

Case 3. Female, age 46, form of insanity, melancholia with agitation. On February 25th patient received a dose of five grains (gramme .33) which caused her to become quiet in an hour and continue so for four hours. On February 26th a similar dose was given in the morning, but she remained quiet only two hours.

She was therefore given another dose at noon, with the result of causing her to remain quiet all the afternoon. On the five following days patient was given two doses daily of five grains (gramme .33) each, with the result of reducing very largely her agitation.

Case 4. Female, age 45, form of insanity, sub-acute mania. February 25th, five grains (gramme .33) given at eight o'clock in the morning caused the patient to become fairly quiet in an hour and to remain so all day. February 26th a dose of the same size produced similar results, although the patient complained of feeling heavy and dull. On the next three days doses of five grains (gramme .33) given once a day caused her to remain quiet for several hours, without any feeling of drowsiness.

Case 5. Female, age 32, form of insanity, dementia. February 26th five grains (gramme .33) in the morning resulted in the patient becoming quiet in an hour and remaining so all day. February 27th five grains (gramme .33) given at 8 A. M., produced a quiet condition in one hour and a half which lasted until noon, when she became noisy and destructive. At one P. M. she was given another dose of ten grains (gramme .66), but did not become quiet until four hours had passed and then remained quiet until bedtime. On the two following days single doses of five grains (gramme .33) in the morning, resulted in keeping the patient in a fairly comfortable condition for several hours each day.

Case 6. Female, age 48, form of insanity, dementia. This woman received on February 26th and the three following days five grains (gramme .33) each morning, she became quiet in each instance in the course of an hour, and remained so seven hours each day.

Case 7. Female, age 32, form of insanity, dementia. On February 27th patient was given at noon five grains (gramme .33), after which she became quiet in half an hour and remained so for five hours. On February 27th a similar dose produced no result. On February 28th ten grains (gramme .66) were given in the morning, the patient became quiet in an hour and remained so during the rest of that day. On March 1st like results were produced with a dose of the same size.

Case 8. Female, age 50, form of insanity, chronic mania. February 26th was given five grains (gramme .33) in the morning, became quiet in two hours and continued so all day. February

27th, a similar dose caused the patient to become quiet in an hour and remain so nine hours. On the two following days, with doses of the same size, the results were alike gratifying.

Case 9. Female, age 34, form of insanity, sub-acute mania. On February 25th patient was given five grains (gramme .33) in the morning, and five grains (gramme .33) at noon, but no quieting effect was manifested. On the three following days ten grain (gramme .66) doses were given each morning, which caused the patient to become quiet on each occasion in an hour and remain so for eight hours.

SUMMARY.—Five grain (gramme .33) doses were given once a day on twenty-seven occasions, and produced in five instances a quiet state which lasted two or three hours, in one instance it lasted four hours and in one five hours, on two occasions a fairly comfortable mental condition resulted, on one no effect was produced, and on nineteen the patients remained quiet all day. Five grain (gramme .33) doses were given twice a day in ten instances. On one occasion it quieted the patient for two or three hours, on two there was no effect produced, and on seven the patients remained quiet all day. Ten grains (gramme .66) were given once a day on four occasions and in each instance the patient became quiet. The same dosage was given twice a day to one patient with a like good result.

In one case with a dose of ten grains (gramme .66) patient was rather stupid, and in another with five grains (gramme .33) a dull and heavy feeling was produced.

CONCLUSIONS.—These new remedies both have a marked hypnotic and sedative action, but trional appears to be the more serviceable as a hypnotic for the insane. On the other hand, small doses of tetronal appear to give the best results as a sedative. As a rule, the hypnosis which is produced is calm and quieting and resembles very closely natural sleep. In a few instances unpleasant after effects were noted, but they did not continue long and were not at any time alarming. They do not depress the heart's action.

In the majority of cases fifteen grains (gramme 1) of trional given in hot milk at bedtime will produce sleep of from six to nine hours' duration which is not accompanied by dreams. The time it takes to produce this effect, is, in favorable cases, from fifteen to forty-five minutes, although it may be prolonged to over two

hours. With tetronal it was found that generally fifteen grains (gramme 1) were required to obtain the same results, and as this remedy is twice as expensive as trional the latter is to be preferred, as a rule. Both of these drugs have the effect with some patients of producing sleep for two nights after a single administration.

Their sedative action appeared to be most satisfactory, and with few exceptions did not produce a drowsy or stupid condition. The dose of trional as a hypnotic is from ten to thirty grains (grammes .66 to 2.) but it is advisable to begin with fifteen grains (gramme 1). As a sedative ten or fifteen grains (gramme .66 or 1.) at least are required, but in some patients even forty-five grains (grammes 3) will not produce any effect. The dose of tetronal as a hypnotic is from five to thirty grains (grammes .33 to 2.) but in the majority of patients fifteen grains (gramme 1) will be required to procure a satisfactory sleep. As a sedative five or ten grains (gramme .33 or .66) given once or twice a day will generally prove to be of benefit.

CASES OF MULTIPLE NEURITIS.

BY W. L. WORCESTER, M. D.,
Assistant Physician, Arkansas State Lunatic Asylum, Little Rock, Ark.

During my practice among the insane, four cases of multiple neuritis have come under my observation, not including some cases of diphtheritic paralysis. One resulted from arsenical poisoning; in the other three no exciting cause could be discovered. Although such cases are not of great rarity, it is comparatively a short time since they have been recognized, and it is my impression that they are still not infrequently confounded with other and less curable conditions. This, and the fact that they were under observation from their incipiency, may perhaps be sufficient warrant for their publication.

CASE I. F. D., a mildly demented man, aged 28, made his escape from the Michigan Asylum for the Insane, at Kalamazoo, May 11, 1886. He was brought back on the 18th of August following by the keeper of the poor-house in a neighboring county, who stated that he had been found a few days previously suffering from symptoms of poisoning. The patient himself stated that he had found in a deserted house a package marked "arsenic" containing a white powder of which he took, he thought, about two teaspoonfuls. He soon became very sick, and vomited violently. In this condition he was found and taken to the poor-house.

At the time of his return, he seemed to have recovered from the effects of the poison, and nothing in his physical condition attracted attention, except that he was much emaciated. Four days afterwards, however, he complained of numbness in the hands and feet, and was noticed to stumble in walking. The sensibility of the skin of the hands was found to be impaired, and the knee-jerk was absent in both legs. Paralysis of motion and sensation progressed rapidly in all four extremities, culminating about the 20th of September. At that time he could only rise from a chair with extreme difficulty. He could take a few steps without support, but often fell in doing so. He was entirely unable to move his toes, and could only give the foot a barely perceptible motion at the ankle. He had more use of his hands,

but the grasp was feeble, and the movements clumsy. It was almost impossible for him to pick up any small object, like a pin. There was decided atrophy of the paralyzed muscles. Only pretty firm pressure could be felt on the hands and feet; hot and cold objects were very imperfectly distinguished, and if, after testing the sense of temperature, the patient's eyes being closed, pressure was made with the head of a pin, he would often confound the sensation of pressure with that of temperature, saying that it was hot or cold. He complained of a constant burning pain in the hands and feet. The muscular sense was impaired to some extent, so that if he tried, with closed eyes, to touch his nose with his finger, he sometimes missed his face entirely. The paralysis, in all the extremities, diminished toward the trunk, which, with the head and face, seemed entirely unaffected. There was never any loss of control of the bowels and bladder, and his mental condition did not seem to be in any way affected. Reaction to the faradic current was abolished in some, and greatly diminished in the remainder of the paralyzed muscles. No treatment was attempted except rest and regulation of diet.

Early in October a slight improvement was noticed; by the middle of November he was able to walk about the room without much danger of falling; he had better use of his hands, improved sensibility, and less pain. I am unable to report the final outcome of the case, as, after having regained, to a considerable extent, the ability to walk, he again made his escape, and was never afterward heard from during my residence in that institution.

Case II. N. K., a farmer, of German nativity, was admitted to the Arkansas State Asylum, August 27, 1889, suffering from melancholia. He soon began to improve, and seemed fully convalescent in the following spring. In April, at his own request, he was given work at repairing shoes, in which he showed great diligence. In the latter part of July, he began to notice a feeling of numbness in his feet when he sat long at his work, which was followed by some muscular pain and weakness in the thighs and legs. My attention was first called to him on the 15th of August. At that time he had the appearance of robust health; his complexion was ruddy, he was in good flesh, and his muscles were large and firm. There was, however, a very decided weakness in the lower extremities; he had difficulty in going up stairs, and could not step up on a bench from the floor. The muscles were slightly

tender on pressure, and he said that they were spontaneously painful at times. No diminution of cutaneous sensibility could be detected. There was no ataxia; he had no difficulty in standing with closed eyes, and the knee-jerks could be elicited in both legs, though they were not very strong.

No very decided change in his condition was noticed, up to the 5th of September, when he had a severe attack of dysentery, which imperilled his life for several days. On the 15th, when he was convalescent from dysentery, it was found that the paralysis had made rapid progress. When the legs were extended, he could barely raise the right from the bed, but could not raise the left. He had also lost strength very much in the upper extremities; the movements of the hands and arms were awkward and clumsy, and his grasp very weak. Cutaneous sensibility was distinctly, though not very greatly, impaired in the feet and legs; the sense of pain and of temperature did not seem to be at all affected, and there was no perceptible disturbance of sensibility elsewhere. Muscles of lower extremities were tender on pressure; nerves not abnormally sensitive. There was a slight uncertainty in touching the nose with closed eyes. Knee-jerks completely abolished; plantar reflexes slight; cremasteric and abdominal reflexes normal. No alteration could be made out in the reaction of the muscles of the upper extremities to the faradic current, but the nerve-trunks seemed to require a slightly stronger current than in the normal condition to excite contraction. In the lower extremities, no current which was not too painful to be borne, whether applied to muscles or nerves, produced the slightest contraction.

His condition remained substantially unaltered during most of the month. He had scarcely any power of voluntary movement of the toes, and none at all of the feet at the ankle joints; the feet were extended in talipes equinus. Muscles were very noticeably atrophied. On the 23d, it is noted that he was able to button his clothing, which he had not been for some time, and on the 27th, there was very preceptible improvement in the use of the hands, but little or none in the mobility of the feet, or in sensation. On the 2d of November, he was able to move the feet slightly; on the 25th he could stand by steadying himself with one hand, and walk when supported. The muscles of the lower extremities were still very much wasted, but there was some return of faradic excitability.

By the middle of December he was able to walk without assistance, and was free from pain, either spontaneous or on pressure over the muscles. He seemed to have entirely recovered the use of his hands, and could write as well as ever, although his grasp was not very strong. There was still a good deal of atrophy of the lower extremities, most noticeable in the thighs.

From this time on, his progress to recovery was steady and uneventful. At the time of his discharge, March 20, 1890, although he had not fully recovered his strength, he was able to take long walks, and there seemed no reason to doubt his complete recovery. The knee-jerks were still absent at that time.

Case III. L. G., a male epileptic, 42 years of age, a resident of the asylum for four years, began to complain of pain in the legs and to walk unsteadily about the 1st of October, 1889. Apart from his epilepsy, he was, in all other respects, in robust health at the time. The knee-jerks were normal, and cutaneous sensibility unimpaired. The paralysis progressed, and he was confined to the bed about the middle of November. At this time he could stand alone with difficulty, there was atrophy, with loss of faradic excitability to a considerable extent, of the muscles of the lower extremities; with a good deal of pain, both spontaneous and on pressure. Tactile sensibility was evidently a good deal impaired in the legs and feet, although his mental condition made it impossible to determine the degree of anæsthesia. The upper extremities were but slighty affected. No analgesia nor thermo-anæsthesia. Knee-jerks abolished; cremasteric, and epigastric reflexes slight. He soon began to improve; was able to walk alone December 20th; could go out for exercise with other patients by the latter part of February; was free from muscular pain and soreness at that time, but could not step up in a chair without taking hold. Knee-jerk did not return until July. Since that time he has seemed in as good health as before his illness.

Case IV. M. C., a married woman, 29 years of age, was admitted to the asylum August 26, 1891, with the statement that she first showed symptoms of insanity on the 22d of the preceding May, seven weeks after the birth of her seventh child. She was bewildered and apprehensive, tried to escape from the house, and fought those who took care of her; denuded herself, and was indifferent to cleanliness. At the time of her admission she was extremely emaciated and very feeble, and she was kept in bed

from the start. At first she was inclined to refuse food, but her repugnance was soon overcome; in the latter part of September she was eating well.

On the 14th of October, the attendant called attention to the fact that, although she was eating sufficiently, and gaining in flesh, she seemed to be losing strength; she was no longer able to stand alone, as she had been. On examination she was found to have scarcely any power over the lower extremities, and the knee-jerks were absent. Reaction of muscles and nerves to the faradic current was abolished in the lower extremities, although, when the current was strong enough to be painful, she made some feeble movements. All the muscles and nerves of the upper extremities reacted, but required a much stronger current than in the healthy condition. Her mental state was such as to make it impracticable to test sensibility, beyond the fact that she was sensitive to pain. Pressure on the muscles of the lower extremities was evidently painful.

Up to about the middle of December, the paralytic symptoms persisted without noticeable change, and the atrophy of the muscles of all the extremities, which was not noticed at the first examination, became very conspicuous. She then began to gain in muscular power. On the 21st of December she dressed herself. On the 9th of January, 1892, she was able to raise her feet from the floor when sitting, which she had not been able to do twelve days previously. On the 24th she could walk a little by pushing a chair before her, and on the 4th of the following month she was able to walk alone. There was nothing noteworthy in her subsequent progress. For a number of months she has seemed fairly strong; she goes out for exercise with other patients, but the attendant says it seems to tire her to climb stairs, and the knee-jerks are still absent. Her active mental symptoms have subsided, and she has passed into a state of quiet dementia.

The foregoing cases are principally interesting as examples of the natural history of this disorder. With the exception of the first, none of the causes usually assigned could be ascertained. Two of them concerned men in apparently robust health, and although the precise date of onset in the other cannot be determined, it was first noticed after decided improvement in the patient's general condition had begun. Intoxication of any sort can, I think, be excluded with reasonable certainty, and there was

no history of exposure to cold, dampness, excessive fatigue, or other noxious influences. As to the treatment pursued, of course the patients were not deprived of the consolation of a dose of something three times a day, but I know of no reason to suppose that anything put into their stomachs, beyond the abundance of nutritious food with which they were supplied, had any influence on the course of the disease. I do not, however, think that their progress after improvement began and the ultimate results would be considered unsatisfactory in cases treated with electricity, massage, phosphorus, strychnia, arsenic, and all the other remedies that have been recommended in such cases.

OCULAR PSYCHALGIA.

BY SMITH BAKER, A. M., M. D.,
Utica, N. Y.

It is becoming increasingly evident that mental states and activities are not exclusively dependent upon so limited a sphere of physical concomitance as observation of the brain and its function alone indicates. If the attempt is made to isolate any one of the many neural aggregations in the body, and to study it comprehensively, the conclusion becomes inevitable also that such a course simply divorces from its true relations that which through every phase of organic evolution has been indissolubly wedded to the system as a whole. Even in the cortex itself where the field is so complex and still so obscure, the fact is becoming more and more provable that the protoplasm of its elementary groups suffers no solution of continuity relatively with the farthest reaches of the nervous system.

The oneness of the neuro-psychical system then, and the ultimate close relationships of the neuro-psychical activities which together make up the complete mind, may be, and evidently should be, assumed in connection with every presentation in the clinical field, no matter how grossly material or how far removed from mental activity it may seem to be. The relevancy of this appears, if we for a moment surmise even, that perhaps people actually suffer more or less from simple non-recognition on the part of their medical advisers of the elementary facts involved. Practically if we as a rule attack with apparent success certain evident abnormalities, we do what the world, our medical teachers largely, and even our own professional judgments demand. But does this limited application of knowledge and skill in general actually result in the cure worked for? In a certain proportion of instances it does. But in many others, the larger proportion probably, the patient will declare that he does not as yet feel well—does not, as he understands it, get well. And day after day the critical observer will note that the troublous waves of outraged consciousness actually do become harder and harder to breast, and that by degrees life takes on not only a sense of physical inadequacy and of mental uncertainty, but likewise what

is often more destructive, as well as distressing, a condition of painful sub-tone indescribable in fact, and yet, which has elicited from a recent writer the descriptive phrase "blue-rose melancholy." This must not be confounded with the technical painful delusions and the like, nor do we mean by it distinctively painful thoughts or the usual apprehensions and fears and other more tangible phobias and algias. As Jacques responded to Rosalind, one who suffered from this condition might say: "I have neither the scholar's melancholy which is emulation, nor the musician's which is fantastical, nor the courtier's which is proud, nor the soldier's which is ambitious, nor the lawyer's which is politics, nor the lady's which is nice, nor the lover's which is all these; but it is a melancholy of mine own." This peculiar "blue-rose melancholy" of "mine own" might be described for present purposes as a certain minor-toned condition of sensibility and affective power, which accompanies and tinctures every psychical experience, and which persists throughout every moment or nearly every moment of time. It is an appearance of constant lead-dullness in the psychical sky, without actual rain or other storm. It is the north-easterly depression of spirit that will not give way even though the hearth burn never so brightly, and the outside world moanings be never so shut out. In fact it is the true psychalgia, the sub-pathetic pain of soul, that imparts its characteristics to every other feeling, thought or process—the rheumatic dejection of the entire sensibility. It is something which temporarily is experienced by almost anyone—simply as the result of functional disturbance limited and passing, and, if the cause be recognized, is readily relieved, leaving perhaps an actual exaltation of sensibility behind it. "I believe I always do like to have the toothache," said a certain prayer-meeting consoler, "for I feel so much better after it's over!"

The more persisting condition, however,—the blueness of months, in which anything from shoe-buttons to hair fillet, from the morning kiss to the struggle in the world's arena, from the half satisfactory day's work to the dreaded night of unsleep, is colored—is not so readily elucidated or relieved; and it certainly leaves the sufferer, not elated, but generally apprehensive of future attacks. In fact, so hidden and mysterious is the cause that frequently it is not only not searched for, but even not truly suspected. For the most part, cure also is not systematically undertaken—the family, friends, society, church, everybody

contenting themselves with deductively assuming appropriate causation, and with dogmatically advising or commanding that the sufferer must look for a change of feeling from within. But a good many times, nevertheless, he could truly enough say with the Vicar of Wakefield when in jail: "I have labored to become cheerful, but cheerfulness was never yet produced by effort which is itself painful." It is frequently overlooked that the more such people labor to become cheerful, the more permanently does attention become fixed upon the fact of uncheer, the greater the exhaustion which ensues, and the further off practically is final relief from the psychalgia made to be. Such people might as well attempt to lift themselves bodily by tugging at their shoe laces, as to expect success in a personal attempt to pull themselves out of their psychical slough. This is not saying that the effort of will is not one of the very most important of remedial measures. But it is affirming that the will must be exerted rightly as to place and time in order to be remedially effective. To a person who wished to reach the ceiling, we would not say "lift yourself up," but rather we would extend a ladder or other rational help; and so to him who would climb up to desirable mental heights and comforts, we may lend best encouragement, as well as extend most rational assistance, through individual objective agencies. The fallacy in dealing with mental pain clinically is to suppose the sufferer is capable of accomplishing an Archimedean leverage without a suitable fulcrum.

In the search for such factors as will appropriately indicate the fulcrum over which these people can be pried, or, better, pry themselves up to a plane of health, we are ofttimes puzzled to desperation. So subtle are the more intimate and consequently more important operations of the system, that one's initial hypothesis may not only be misleading, but a source of interference and danger as well. Frequently, in fact, one may be obliged to yield a seemingly accurate conclusion, and to follow up over again, and sometimes again and again, the cues that nature half coquettishly throws out. Fishing for trout in a mud puddle upon the suggestive appearances of a disturbed surface, would not be more disheartening than may be the etiological and diagnostic investigation of many of these cases. To illustrate:

A lady, 25, unmarried, naturally bright, healthy, and pleasantly occupied, had always been cheerful, outwardly, and inwardly as well, up until within two years before consultation. The usual

physical examinations revealed nothing; irregularities of function, secretive, nutritive, excretive not being discovered or acknowledged. In fact, she appeared to be well, save in one particular: from the beginning of her trouble, and comprising it exclusively, there had slowly and persistently developed a "blue-rose" feeling which had colored everything she had attempted to think or do. This she had tried to get rid of in various ways. For six months she had tried remedies and physicians numerous; and yet was no better. In fact just recently she had plunged into a blueness more dense than ever; and now she prayed for relief or termination absolute. How to effect this was not more puzzling than how to account for her persistent and deepened mental pain. She was not technically hypochondriacal; not hysterical apparently; not of a specially marked pedigree; and did not live irrationally. She did housework in her own home, read the better class of periodicals and literature, and was sufficiently musical to be an acceptable entertainer of numerous friends. Nor was there a distressing love affair that could be ascertained. Being a Catholic, and somewhat morbidly conscientious, I at first thought this might be a source of difficulty and so advised a fuller and franker confession, stricter conformity to the requirements of her church, and then to engage for a time in other scenes and activities. After several weeks she reported but little, if any, improvement. Vaginal and rectal examination at this time gave negative results only. Altogether unexpectedly, however, I came upon the fact of a corneal astigmatism, as measured by the Javal Schiötz ophthalmometer, of 1.50 D. axis 90° in each eye which proved to be hypermetropic. Why there had not been ocular symptoms as such I am at a loss to explain, except on the ground of constitutional vigor, or of a sort of idiosyncratic power of endurance. Evidently, however, here was a possibility of conflict between an astigmatic cornea on the one hand and a lenticular mal-adjustment on the other hand. In the absence of any other tenable explanation of the psychalgia, I assumed the possibility of ciliary tension as being the ever-present cause of some reflex cerebral mal-functioning more easily assumed than explained at this stage of neurological science and practice. The assumption proved to be a most useful guess at the truth; for no sooner had the requisite optical correction been given, than there rapidly followed relief of the mental pain and the self-same surroundings and activities once more became full of cheer and satisfaction.

Another instance: A student, 22, country-born and bred, hard muscled, determined, able, had developed a similar psychalgia which accompanied all his experiences and lead-colored all his life. At first this was supposed to be owing simply to the over-eating and under-exercise incident to change from farm to school. But the trouble persisted throughout the following active vacation, and every manner of dosing proved to be a failure. Finally it was discovered that he required cylinders +2.00 with axes 75° and 115° respectively, to give him easy and clear vision, although he had never suspected even the fact of eye-strain, and attention had been attracted in various other directions instead. This discovery was now followed by another: no sooner had he worn his glasses for a little than he of himself volunteered the explanation that overuse of his eyes had evidently been the source of his distress of mind, for the glasses had cured him.

This man had been investigated in almost every nook and by-way of his system and had been subjected to every notion and form of treatment possible:

"*Mrs. Hardcastle*: Did not I prescribe for you every day and weep while the receipt was operating?

Tony: Ecod, you had reason to weep, for you have been dosing me ever since I was born. I have gone through every receipt in the *Complete Huswife* ten times over; and you have thoughts of coursing me through *Quincy* next spring."

And so my patient had gone through the "domestic purgatory," as he once called it, besides having been treated by the profession —only to be relieved at last by optical correction of the exclusive cause.

It may be true philosophically, as Emerson says, that "we are always happy when we can see far enough." But the subject of the following sketch would probably make a scientific exception.

M. A., 37, studious and devoted to business, had some ten years since been given plus lenses for about two diopters of manifest farsightedness. During this period he had occasionally, at times, left off his glasses for a time under the recurring impression that his eyes were so well he did not need them. After several unsuccessful attempts, however, he came to note this fact: that whenever he had laid them aside for even a few days he had gradually but surely grown heavy-hearted, thought had become difficult and lugubrious, and feeling so blue eventually that all the high lights available were insufficient to afford relief, while

resumption of his glasses would quickly afford most welcome relief.

Quite recently, a young woman with myopia of 3.50 D, and manifest insufficiency of the internal recti muscles, has expressed herself as being relieved, by the optical correction, of an indefinable shrinking and dubiousness out of all proportion to the lack of visual power; and, undoubtedly, were attention given to the matter, there would be found among young people quite a proportion of instances of unusual diffidence, of temperamental perversions, and of lackadaisical interest in life—each and all amounting to definite phases of psychalgia, and standing in the way of completest mental activity and growth. At any rate it is worth while to remember this, against the occasion when social requirements crowd, and parental anxiety wanes not.

But this paper is not for the purpose of giving undue prominence to the really limited category of ocular psychalgia. The rather it were better to indicate simply the field of inquiry, to elicit attention to its significance, and to likewise bring to mind how careful and comprehensive should be the investigation before cases of mental pain are put off or dismissed with the commoner dogmatisms, expedients and prescriptions, useless if not harmful. Ordinarily we look rather exclusively to the mental sphere with some excursions into the circulatory and nutritive spheres, for needful light upon this subject. And we mistake not in making these our starting-points for etiological and diagnostic investigations. But it is evident that the search should not stop with what these lead to. This is illustrated by a case that puzzled and escaped discovery beyond patience almost:

A young woman without ordinarily discoverable physical abnormalities presented a history of persisting mental suffering for a number of years. She also complained slightly of visual distress which led to correction of a compound hypermetropic astigmatism represented by S -|- .50 D. Cyl. -|- .50 axes 75° and 105° respectively, and likewise to a very confident assurance that her mental tone would quickly recover. But she did not get well, nevertheless; in fact the more distinctly she saw, the worse she seemed to be. Then came the thorough going over which every case needs at first sight. The ocular attention had been appropriate, but the field of observation limited to this had not been inclusive enough. After much hunting, this was revealed: something that the innate modesty of true young womanliness had unconsciously kept in the background—that at times she had suffered more or less from

distressing micturition and likewise from a more severe and yet never satisfactorily located pain upon locomotion. Before the first vesico-vaginal examination, I did not discover the reason; but finally discovered along the floor of the urethra, to the extent of about a centimetre, a granular hyperplasia which proved to differ greatly in sensitiveness at different times, owing probably to its being of a semi-erectile nature. It was risky to affirm that her mental suffering might have been owing to so remote an irritation: but I advised removal of the offending surface, and, to my joy as well as hers, the skies brightened, and the corrected vision, no longer a source of distress, now enabled her to be and do as not before.

Rampant specialism came very near in this case to neglecting the wholesome lessons of systemic universalism, as found either in health or in disease.

When we try to think of the probable reason why such limited foci of causation should give such permanent and fateful results, we cannot well avoid the conclusion, that the local and apparent factor is quite inadequate, unless we associate with it an underlying, more expansive condition, as the pathologically fertile soil for it to thrive in. Given this neuropathic basis, and it may require but a slight local excitation for the development of mental pain. Perhaps this has been unduly regarded in connection with certain conditions of the pelvic and abdominal organs. That it should require consideration in connection with certain conditions of the ocular system, is not surprising, although the difficulties attending the elucidation of the fact probably stand in the way practically. However, in any given case the true local and exciting cause should be searched for until found. Only in this way will the temporary resulting psychalgia be remedied before it has become permanently registered and the more serious melancholia evolved. I recall the instance of a woman who from a child had suffered from a series of alternating depressions and exaltations, not amounting exactly to a definite *folie circulaire*, and who was rescued apparently from final precipitation into the more dreadful insanity by a cylindro-prismatic correction of an oculo-muscular defect. In such psycho-neuropathic constitutions it seems most truly scientific that the whole system be equilibrized and toned at every point possible. While in more definite senses than the Berkleyism metaphysical, it is being constantly proven, that so far as comfort is concerned, it may be truly said "seeing is being."

THE BLOOD IN MELANCHOLIA AND THE EFFECT OF SYSTEMATIC TONIC TREATMENT.

BY WHITMORE STEELE, M. D.,
Assistant Physician at Utica State Hospital, Utica, N. Y.

That there is a decrease in the corpuscular richness, and a deficiency in the percentage of hæmoglobin, in the blood of patients suffering from melancholia, is at the present time a well established fact. Macphail*, in an exhaustive series of observations, more particularly on cases of general paresis and dementia, found also that there was a marked deterioration in the quality of the blood in this class of cases. In addition he found that the blood of the average number of patients admitted to hospitals for the insane was considerably below the normal, in regard both to corpuscular richness and percentage of hæmoglobin, and that there was also a marked improvement in the blood of those patients who were discharged cured, the improvement of the mental symptoms seeming coincident with improvement in the blood and general bodily condition of these patients.

Smyth† found, in an examination of ten cases of melancholia, that, while there was a very slight decrease of the number of red corpuscles, there was a marked decrease in the percentage of hæmoglobin. He also found that the specific gravity of the blood in most cases was above the normal. Macphail,‡ in a later series of observations, found that, out of forty-two cases of melancholia, only fifty per cent. showed a decrease in the number of red corpuscles, and in a little over one-half the cases examined the percentage of hæmoglobin was only slightly abnormal. In the few cases of melancholia which I have to record, I have made an attempt to obtain some idea of the results reached by a systematic tonic treatment of these patients and to record changes observed in the blood, and the mental changes, if any, that were coincident with this alteration. For counting the blood corpuscles the very convenient and accurate instrument known as the Thoma–Zeiss hæmocytometer was used. In the estimation of the percentage of hæmoglobin the

* Journal of Mental Science, 1884.
† Journal of Mental Science, October, 1890.
‡ Tuke's Dictionary of Psychological Medicine.

hæmoglobinometer of Fleischl was used. In the use of this instrument I found the same fault to exist that Stengel* found present in Fleischl's apparatus, namely, that, although the scale is marked from 0 to 100 or more per cent., the blood of a number of healthy men examined by me was found to vary between 80 per cent. and 90 per cent., and in only one case, a very plethoric individual, was it found to reach 100 per cent. In this series of observations, particular care was taken to observe the caution mentioned by most writers, namely, the avoidance of pressure of the finger from which blood was taken. In all of the cases two or three drops at least were counted, and the blood was withdrawn in nearly all of the cases at about the same hour at each observation. As all the cases studied were women care was taken to avoid their menstrual epochs; there probably being marked diminution in the quality of the blood at this time. In most of the cases the blood was examined between four and five hours after meals and, as a rule, in the morning. After each individual examination the capillary tube was carefully washed out with a mixture of alcohol and ether, as was also the cup used in the estimation of the hæmoglobin. The majority of patients selected for observation were cases of acute melancholia—most of them of fairly short duration and with marked depression and delusions. There were also several cases of chronic melancholia and some of the sub-acute form with a longer residence in the hospital.

The following table shows the results of the examination of thirty-five cases of melancholia, selected as typical examples of that form of mental disorder:

No.	Age.	Weight.	Hæmoglobin per cent.	No. of Hæmacytes.
1	63	95	75	3,750,000
2	50	105	85	4,000,000
3	26	110	70	2,550,000
4	39	130	75	3,375,000
5	52	135	75	3,500,000
6	50	116	65	3,000,000
7	29	127	80	3,375,000
8	30	115	70	2,750,000
9	48	190	75	3,750,000
10	39	116	75	3,125,000
11	56	125	70	2,500,000
12	20	119	75	3,625,000
13	48	134	75	2,625,000

* University Medical Magazine, Vol. V, p. 375.

No.	Age.	Weight.	Hæmoglobin per cent.	No. of Hæmacytes.
14	30	102	65	2,750,000
15	36	130	75	3,500,000
16	36	112	70	3,250,000
17	23	95	65	2,500,000
18	25	120	80	3,000,000
19	50	150	90	3,500,000
20	29	136	70	2,250,000
21	35	90	65	3,000,000
22	45	130	45	2,250,000
23	35	120	75	3,000,000
24	48	115	65	3,000,000
25	49	135	85	3,050,000
26	28	105	55	2,625,000
27	58	148	75	3,250,000
28	21	94	75	3,000,000
29	43	135	70	2,500,000
30	48	114	70	3,500,000
31	28	130	75	2,225,000
32	28	100	70	2,500,000
33	26	120	60	2,225,000
34	24	95	60	2,875,000
35	24	115	65	2,500,000
Average....			71	3,000,000

It will be seen on reference to this table that the anæmia was quite marked in most of these cases and that the average percentage of red corpuscles and the average percentage of hæmoglobin is much below the normal. It will also be seen that a much larger number of those examined showed a deterioration in the quality of the blood than in the cases recorded by Macphail. In fact in only one of the thirty-five cases tabulated, did the blood show the normal amount of corpuscles and hæmoglobin. In about one-half the cases the blood was slightly deteriorated, and in a little less than one-half was markedly below the normal in both respects. It may be stated here that in several cases of acute mania examined at the same time it was found that, although the corpuscular richness was less diminished, the amount of hæmoglobin was reduced to about the same percentage, this being contrary to the generally accepted statement that in mania the blood is richer in corpuscular elements than in health, and that the percentage of hæmoglobin is not reduced at all. Of these thirty-five cases, twelve were selected and put upon special tonic treatment consisting of the administration to some of cod liver oil; iron, in the

form of an elixir of iron, quinine and strychnine, while to others with an irritable stomach was given an elixir of the citrate of iron in ten grain doses three times daily. These cases having been kept on tonic treatment with nutritious diet and under good hygienic conditions for a period of six weeks, their blood was examined, and the results recorded was as follows:

Case 1. S. B., age 63, a case of sub-acute melancholia of four months' duration and recurrent in character; quite depressed at times, and had threatened suicide. When first examined, blood was found to contain three million seven hundred and fifty thousand red corpuscles per cubic millimetre, and eighty-five per cent. of hæmoglobin. After six weeks was found to have three million five hundred thousand red corpuscles and eighty per cent. of hæmoglobin, with no improvement of mental condition, perhaps was a trifle more depressed.

Case 2. M. C., age 26, a case of acute melancholia of four months' duration, first attack; also suffered from chorea minor. Delusions of spiritual unworthiness, suicidal tendencies. First examination showed two million five hundred and fifty thousand red corpuscles and seventy per cent. of hæmoglobin; considerable crenation of the corpuscles. After six weeks' tonic treatment there was found three million five hundred thousand red corpuscles and eighty per cent. was hæmoglobin. Corpuscles were very much less crenated. The choreic movements had almost entirely ceased, depression very much less marked, delusions disappeared, and marked gain in bodily weight and vigor.

Case 3. L. L., age 29, a case of acute melancholia of three months' duration. Delusions of spiritual unworthiness, hallucinations of hearing, refuses food. First examination showed three million three hundred and seventy-five thousand red corpuscles and eighty per cent. of hæmoglobin. Second examination showed three million five hundred thousand red corpuscles and eighty per cent. of hæmoglobin, with some slight improvement in mental symptoms and no longer refusing food. Mental state, however, far from being clear.

Case 4. C. M., age 48 years, case of chronic melancholia of about ten months' duration, hypochondriacal delusions. First examination showed three million seven hundred and fifty thousand red corpuscles and seventy-five per cent. of hæmoglobin. The second examination showed four million red corpuscles and eighty

per cent. of hæmoglobin, with no improvement in mental condition. Later on, this case developed into melancholia agitata, and shortly afterwards died of rupture of the right auricle of the heart.

Case 5. M. W., age 48, suffering from acute melancholia of eight months' duration, delusions of personal unworthiness and marked depression. The first examination showed two million eight hundred thousand red corpuscles and seventy-five per cent. of hæmoglobin. After six weeks of tonic treatment examination showed two million five hundred thousand red corpuscles and seventy per cent. of hæmoglobin, with no improvement of mental symptoms.

Case 6. E. C., age 30, a case of sub-acute melancholia of one year's duration, hypochondriacal delusions. First examination showed two million seven hundred and fifty thousand red corpuscles and sixty-five per cent. of hæmoglobin, with considerable crenation of the corpuscles. Second examination showed three million two hundred thousand red corpuscles and seventy per cent. of hæmoglobin, the crenation of the corpuscles was less marked and mental condition slightly improved.

Case 7. M. D., age 36, case of acute melancholia of six months' duration, delusions of spiritual unworthiness. The first examination showed three million two hundred and fifty thousand red corpuscles and seventy per cent. hæmoglobin. After six weeks' tonic treatment was found to have the same number of red corpuscles and the same percentage of hæmoglobin, with very slight improvement in mental symptoms.

Case 8. J. F., age 45, case of chronic melancholia of over two years' duration. First examination showed two million nine hundred thousand red corpuscles and seventy-five per cent. of hæmoglobin. Second examination showed three million red corpuscles and eighty per cent. of hæmoglobin with marked improvement of mental condition.

Case 9. E. M., age 52, case of chronic melancholia of about two years' duration. First examination showed three million red corpuscles and seventy-five per cent. of hæmoglobin; before the second examination was made the patient had an attack of dermatitis exfoliativa which reduced her general condition considerably. The second examination showed two million eight hundred thousand red corpuscles and sixty per cent. of hæmoglobin, the mental symptoms remaining about the same. The

skin disease was probably responsible in this case for the impoverishment of the blood.

Case 10. C. M., age 58, case of acute melancholia of seven months' duration with exacerbations, of a stuporous form, and with suicidal tendencies. First examination showed three million five hundred thousand red corpuscles and seventy-five per cent. of hæmoglobin, with considerable crenation of the corpuscular elements. The second examination showed three million red corpuscles and seventy per cent. of hæmoglobin with an increase in the melancholia and a failing of the general health.

Case 11. A. L., age 21, case of acute melancholia of two months' duration with delusions of spiritual unworthiness, history of masturbation and mental overwork. First examination showed three million red corpuscles and seventy-five per cent. of hæmoglobin. After six weeks the blood contained three million five hundred thousand red corpuscles per cubic millimetre and eighty per cent. of hæmoglobin, general health was much improved, delusions almost all gone and the mental depression very much less marked.

Case 12. M. G., age 43, a case of acute melancholia of one month's duration with hallucinations of hearing and delusions of persecution. The first examination showed two million five hundred thousand red corpuscles and seventy per cent. hæmoglobin. Second examination showed three million red cells and seventy per cent. hæmoglobin. There was marked improvement in general health, auditory hallucinations had almost ceased and no delusions were present.

It will thus be seen that in about fifty per cent. of these cases there was some improvement, slight in some and going on to a complete recovery in others. In some of those cases which showed no improvement at the time of the second blood examination, the mental symptoms have since improved and they are convalescent at the present time. It will be seen on looking at the first table of thirty-five cases, that, while the percentage of hæmoglobin is higher than the cases examined by Smyth previously referred to, his cases having an average of sixty-nine and seven-tenths per cent. or a very slight diminution in the corpuscular elements, in the series of cases I have tabulated the hæmoglobin presented an average of about seventy-one per cent., while the corpuscular elements were much more reduced.

Macphail found a deterioration very marked in the blood of

melancholia, but not as much reduced as in the cases I have recorded.

From a study of these cases, we are, I think, warranted in forming the following conclusions:

First. That in melancholia, both acute and chronic, there is a very marked deficiency in the number of hæmacytes, in very few cases the percentage even approaching to the normal, and that the percentage of hæmaglobin is reduced in like proportion.

Second. That a number of cases showing considerable crenation of the hæmacytes at first, are found to be much less crenated after tonic treatment and the mental improvement following it.

Third. That systematic tonic treatment is found markedly efficacious in the treatment of this form of mental disorder. The administration of iron by itself or a combination of iron, quinine and strychnia seems equally effective. It would appear also that although melancholia may not be caused by an impoverishment of the blood *per se*, such impoverishment almost invariably exists, and in a large majority of cases improvement of the mental symptoms is co-incident with improvement in the general health and in the quality of the blood.

ABSTRACTS AND EXTRACTS.

MANIA PELLAGROSA.—Pellagra in Italy is on the increase. In 1888 the general mortality reached the figure of 829,431, while the victims who succumbed were 3,483. It is a disease very disastrous in its sequelæ, one of which is a distinct mental neurosis manifesting itself in what has been classified as "Mania pellagrosa." In Lombardy, the headquarters of pellagra, the *manicomii* (lunatic asylums), according to Professor Sormanni of Pavia, show a large proportion of the "pellagrose insane," those of Milan leading the list. In 1885 the Milanese *manicomii* admitted a total of 122 pellagrosi with 44 deaths; in 1886 a total of 147 with 45 deaths; and in 1887 a total of 105 with 46 deaths. Professor Sormanni demonstrates that while pellagra in general is on the increase, the mortality from it becomes more than proportionally heavy, and that the most numerous victims who succumb to it, fall under that peculiar (and also increasing) form of it—"mania pellagrosa." To combat this deplorable phenomenon, prevention rather than cure is the course indicated. But, meanwhile, in the Milanese provinces there has been erected an "Asilo de'Pellagrosi," where the treatment, mainly dietetic, is practised, from which the Legislature may be guided to the best means of averting the malady at its origin. That treatment consists in the substitution of a mixed farinaceous and meat diet for that exclusively meted out to the laborer—namely, the polenta (porridge) of meal made from unsound maize, which is his hereditary fare. Good broth, with milk and a graduated allowance of wine, replacing the polenta above described, suffices to put the young pellagrose patient on the true alimentary tack, while in more confirmed cases—those in which neurosal lesion is already apparent—the same diet, coupled with a judicious use of alteratives and tonics, seldom fails to bring about physical and mental convalescence. At this stage, the resumption of out-door or field work comes in to complete the reclamation of the "pellagroso," and he leaves the "Asilo" a fitter man, capable of better work and thus enabled to give himself the more generous diet he has found to be necessary for body and mind. The "Asilo" which has thus afforded an object lesson to the individual and to the State in dealing with pellagra, stands in the commune of Inzago, and its success is stimulating the charitable throughout the Alta Italia to erect others with a similar object,—chiefly in the Lombard and Venetian territories. Practical legislation on the part of the government has yet to intervene for the improvement of the laborer's lot in that region—the more equitable incidence of taxation and the provision of public employment where private enterprise is insufficient. Works, on an imperial scale, such as the replanting of the recklessly denuded hill-sides, the regulation of the affluents that feed the great rivers and the embanking of these latter—works, imperatively called for to prevent the disastrous floods that annually devastate the Venetian province particularly—might profitably engage the services of those for whom there is barely enough employment in the fields. Professor Sormanni, meanwhile, can claim this result—of having demonstrated that pre-

vention, not cure, is the proper way of dealing with this Italian scourge and that the appointment of commission after commission to "investigate" the phenomena is merely a political makeshift, to relieve the State of its obvious duty.—*The Lancet*, January 14, 1893. J. M. M.

INSANITY IN EARLY CHILDHOOD.—Dr. Wharton Sinkler (*University Medical Magazine*, January, 1893) reports three cases. The first followed an epileptic fit occurring when the patient was three and a half years old. She is extremely restless and never quiet, swears and does everything bad that she can. She is absolutely unteachable. She talks and sings a great deal and is very noisy. During the two years she has been under observation she has had several epileptic fits and occasional attacks of acute mania, during one of which she seized a kitten and killed it. There was no relation between the epileptic attacks and the periods of mental excitement. She died in a convulsion when about seven years old.

In the second case the disease followed immediately after a severe fright, when the patient was about two and a half years old. She is unruly and excitable, and cannot be left alone with other children lest she hurt them. She bites and tears her clothing, is dirty in her habits and disobedient. She repeats continually the phrase "baby had a book," but uses no other words. After many months she improved greatly in all respects, but still remained somewhat excitable and easily irritated.

There was no discoverable cause in the third case except the possible existence of petit mal. The disease appeared at two years and two months. The first symptom was nocturnal restlessness, with spells of causeless crying, followed by loss of power of articulate speech, lasting a few minutes. She is dirty in her habits, and will even eat her own fœces. She talks and walks well, but is very destructive. She sleeps badly and often at night is found talking to imaginary companions. She frequently masturbates.—*International Medical Magazine*, February, 1893. J. M. M.

HYSTERICAL AMNESIA.—Professor Janet devotes his second lecture before Charcot's clinic to this subject. In his opinion, amnesia is one of the fundamental symptoms of hysteria, and without taking it into account, it is impossible to understand such phenomena as astasia-abasia, hysterical mutism, hysterical paralyses of all sorts, and, especially, somnambulic states. The lecture, however, is devoted to loss of memory in the ordinary sense of the word. This is a common symptom, and often misunderstood, being attributed to perversity or simulation. It may be systematized, localized, or complete and general. In the first case, the patient forgets what refers to certain persons or things.

A patient whom the lecturer met daily on the ward, one morning did not answer when he spoke to her, and on inquiry it appeared that she did not recognize him, and was surprised at his accosting her familiarly. A young woman who had passed several years in England, and spoke and understood English very well, became hysterical and lost completely her

recollection of her stay in England, and her knowledge of the English language.

In localized amnesia, the patients are unable to recall the events of some longer or shorter period of their lives, often including matters in which, at the time, they were strongly interested. The period may be of months or weeks, or only a matter of hours or minutes.

The cases which the lecturer characterizes as complete and general seem not to be so in the sense that all memory is lost; the patients have lost the power of acquiring any new memories. A patient at the time in Charcot's clinic had been bitten by a rabid dog. She had a violent hysterical attack, and from that time on was unable to retain anything that happened in her recollection. She had forgotten the circumstance of her being bitten, her journey to Paris, her treatment at Pasteur's establishment; could not be made to remember where she was, did not recognize the persons she met every day, and was continually asking the same questions as to where she was, and how she came there.

He calls attention to the similarity of these phenomena to the forgetfulness experienced by the subjects of somnambulism and hypnotism to what happened while they were in those conditions. There is also a very striking analogy between the amnesia and the anæsthesia of hysterical patients. The amnesia can be shown, by similar means to those used in anæsthesia, not to be absolute; the patients have not really forgotten the things that they cannot recollect. Thus, the patient who had lost the recollection of her stay in England and of the English language was easily hypnotized, and, while in this condition, would talk freely of her stay in England, and carry on a conversation in English without the slightest difficulty. The patient who had been bitten by a rabid dog, was afraid of dogs, a thing which she could not understand, as she had not been so previously. She had been heard to talk about the dog that bit her, the hospital and the physicians, in her sleep, and could be brought to tell all the forgotten circumstances in the hypnotic state. When engaged in conversation with another person, if a pencil was slipped into her hand and she was asked in an undertone the names of people with whom she associated, she would write them down, carrying on the conversation about other matters all the while. When her attention was called to the matter, she would deny having heard the questions or having written anything, and would be much surprised to see the answers in her own handwriting. If her attention was absorbed in reading, or in arithmetical calculation, she would answer such questions verbally.

Not only is there a close analogy between hysterical anæsthesias and amnesias, but in some cases, at least, they are very intimately associated. A patient who had lost the recollection of a certain period, and in whom it could not be revived by hypnotic procedures, one day, while in a state of spontaneous somnambulism, recovered it completely. Ordinarily, the whole surface of the body was anæsthetic, but on this occasion she was found to have recovered the sensibility of the right side, and it was ascertained that during the period to which the amnesia referred, she had suffered from left hemianæsthesia. Other analogous cases had come under the lecturer's observation, one of which was demonstrated.—*Arch. de Neurol.*, July, 1892.

UNSUCCESSFUL TREPHINING FOR TRAUMATIC EPILEPSY.—Reported by Manoury and Camuset. The patient, an inmate of the Asylum for Insane at Bonneval, had become epileptic in consequence of a kick of a horse, received at the age of 14 years, fracturing the frontal and parietal bones, slightly to the right of the median line. The attacks were numerous and severe, usually occurring, in series, separated by twelve or fourteen days of exemption. There was no paralysis, and no predominance of either side in the convulsive movements.

Three openings were made with the trephine, and the aperture enlarged and smoothed with Rongeur forceps. Projections were found on the internal surface of the bone, which evidently compressed the underlying cerebral substance. There were no adhesions of the dura mater. Recovery was uneventful, except for the occurrence of seventeen convulsions during the first three days after the operation. No improvement was effected in the patient's condition, seventy convulsions having occurred during the three months that had elapsed since the operation.—*Ibid.*

SUGGESTION IN HYSTERICAL PATIENTS.—This is the subject of Professor Janet's third lecture at the Salpêtrière. He calls attention to the fact that, in many hysterical patients, it is possible to produce phenomena better known in connection with the hypnotic condition—to cause them to see, hear and feel what they are told to, and to act under the influence of delusions, illusions and hallucinations. This condition he attributes, first, to a limitation of the power of attention, in consequence of which the patients are unable to pay attention to more than one thing at once. Thus, a patient at one of the hospital balls told him that she had been unable to look at any of the dresses, because she had been engaged for every dance, and she could not dance if she attended to anything else. In addition to this, there is a weakness of will, so that the patients are incapable of acting from motives, although they perform complicated acts in an automatic manner without difficulty. A patient, in describing her own condition, said: "When I want to sing myself, it is impossible; at other times I hear myself sing this song perfectly well—when I wish to write, I can find nothing to say; I have to let my hand do what it will, and then it writes four pages." Thus it comes about that whatever is suggested to the mind of the patient is perceived or done, independently of her proper personality.—*Ibid.*, November, 1892.

DIFFERENTIAL DIAGNOSIS OF HYSTERIA AND ORGANIC CEREBRAL DISEASE.—Ghilarducci reports, from Charcot's clinic, six cases, simulating organic cerebral disease, in which he believes the diagnosis of hysteria to be justified. The conditions simulated were, sensory epilepsy in one case, Jacksonian epilepsy in three, in one of which it was accompanied by other symptoms giving rise to suspicion of cerebral syphilis, apoplexy in one, and traumatic hemiplegia in one. The diagnosis was made by the stigmata of hysteria and anomalies in the course of the cases.—*Ibid.*, November and January, 1892–93. W. L. W.

THE FUNCTIONS OF THE THYROID GLAND.—Hofmeister, *Munich Med. Wochenschr.*, No. 35, 1892, (abstract in *Rev. Gén. de Méd.*), found by extirpating the thyroid in young rabbits, that there was produced (1) a cerebral hypertrophy already observed by Rogowitsch and Stieda. (2) A very considerable arrest of the development of the bones, with delayed ossification of the epiphysal extremities. Similar phenomena were observed by the author in children whose thyroid glands had been removed and in cretins with thyroid atrophy. (3) A fallicular hypertrophy (neurokystic degeneration) of the ovaries, with pronounced ecstasis of the veins, phenomena analogous to those recently observed by Langhans in the human subject.

After a discussion as to the importance of the peripheral symptoms noticed recently by Langhans and Kopp, as met with in cretins, in persons who have undergone thyroidectomy and in animals (apes, dogs, &c.), thus operated upon, the author takes up the question of the relations of myxœdema and cretinism with the thyroid gland. According to him there seems to be no doubt that myxœdema is dependent upon a suppression of the functions of this organ. He is less certain, however, as to cretinism, but nevertheless inclines to the belief that cretinism is due to a suppression or, in light cases, to a diminution of the functional activity of the thyroid.

H. M. B.

M. V. Robin, *Lyon Méd.* No. 32, August 7, 1892, (abstract in *Rev. Gén de Méd.*), reports the case of a congenitally myxœdematous child seven years of age, without morbid heredity, but a product of late gestation, having been born in the eleventh month, fontanelles persistent, unable to walk, and with an incoördination of the muscles of deglutition which interfered with natural swallowing. The neck was too much enlarged to determine the absence of the thyroid.

M. Robin used hypodermically the liquid obtained by expression from the freshly obtained thyroid of the sheep, under antiseptic precautions, a mixture of the thyroid juice, blood, and the carbolic solution in which the gland had been immersed. The results were altogether favorable, the child quickly lost its torpor, its color became more natural, and its appearance more intelligent. The bodily temperature increased, the infiltration of the neck disappeared, so that it was easy to demonstrate the absence of the thyroid gland. The results of the injections not being sufficiently permanent, the transplantation of the gland was also practiced successfully, with good results.

It is noteworthy that this child had twice suffered from acute infantile disorders with pulmonary complications and moderate fever, during which the myxœdema disappeared, only to take on its former or even greater intensity after recovery. The author suggests a new function for the thyroid gland, that it is a thermic organ.

H. M. B.

TRIONAL AND TETRONAL.—Dr. Schaefer of Berlin finds that these two drugs are available succedanea to opium and hyoscine. They are indicated in various mental diseases (melancholia, mania, epilepsy, neurasthenia, &c.),

and for insomnia, the fulgurant pains of ataxia, etc. He gives them in quantities of 7 or 8 grains up to 60 grains or even more.

Dr. Boettiger (*Sem. Méd.*, December, 1892), finds that trional is a powerful sedative and hypnotic, which, given in proper doses, rarely causes any serious or disagreeable symptoms. Its hypnotic effects are produced very rapidly, often within fifteen minutes. In simple somnia one gram (15 grs.) is often effective and two grams are certainly so. In mild psychic disturbances and emotional troubles, either primary or secondary, it is very useful. Even in intense excitation it is sometimes efficient when given in several doses of one grain each during the day, and in this way supplies the place of hyoscine. It failed in his hands only in patients suffering with severe neuralgic pains, in certain alcoholic cases, and in cases of extreme mental and motor agitation. The hypnotic dose ought not to exceed three grams (=45 grs.) Dr. Bœttiger has employed it in injections with similar good results.

Dr. S. Garnier, (*Le Progrès Méd.*, December 3, 1892), reports experience with these two substances. They are both white crystalline substances, slightly bitter, trional the more so, but they are easily administered with honey or sweetened milk. They are as insoluble in cold water as sulfonal, and, though soluble in boiling water, they are re-crystallized on cooling. Trional is rather soluble in ether, more so than tetronal, which requires eighteen parts to one. It is also more soluble in alcohol than tetronal, the proportions being 1.33 and 1.37, respectively.

Their hypnotic and sedative effects in the insane he finds rather decided. They seem to be quicker than sulfonal, even with a lesser dose. He has never had to exceed 4½ grams daily in mania with constant agitation, either in divided doses through the day or in a single dose at night. In neurasthenic cases a less amount was sufficient for good results.

He has tried them in paretics, but is not prepared to say that they are suitable, bearing in mind their probable congestive action on the brain.

It would be premature to state which of the two is the better. Still it seems that neither is inferior to sulfonal, according to the testimony of most of the experimenters. One very marked advantage is in their cost. Trional is at present only two-fifths the price of sulfonal and tetronal only a little more expensive than trional. This consideration alone would seem to be enough to insure the early substitution for sulfonal of these agents, provided the further experience in their use is as favorable as it seems to be thus far.

Raimondi and Mariottini, *Rif. Med. V. 3, 1892*, (abstract in *Annali di Neurologia*) offer the following as their conclusions from experimental and clinical investigations carried on by them in the Policlinic at Siena.

(1). Trional and tetronal are potent hypnotics, acting in the same manner as sulfonal on the brain cortex.

(2). Any pronounced and measurable difference in the hypnotic power of these two drugs, compared with sulfonal, is not proven, but the latter in equal dose is less prompt in its effects.

(3). The influence of the ethylic group in the human subject is shown in

the hypnotic action of these three disulphones, also an increase in toxicity; thus the three stand as follows in an ascending scale: sulfonal, trional, tetronal, in the proportions of 1, 1.5, 3.

(4). The action of these drugs is but slightly injurious to the vital functions, or to the respiratory and circulatory apparatus, but they vary in this respect according to the ratio given above.

(5). Like sulfonal, they have a slightly cumulative effect.

(6). Like sulfonal, they do not lose their effectiveness with the time their administration is continued, nor do they create an habitude (like morphine), rendering increased doses necessary.

(7). Small therapeutic doses do not affect perspiration or temperature; the sleep and respiration continue normal.

(8). The secondary effects of slight intoxication observed with the use of trional and tetronal are the same as those observed after large doses of sulfonal, viz., depressive symptoms in the motor and sensory sphere; to the last of these belong, the sensation of binding the head, and to the first the incoördination, the unsteadiness, the paresis, and each and all of these can be observed when two or three grams are used daily for several days consecutively.

The injurious effects of these disulphones on the nervous centres not being at once exerted on the vital functions, it suffices to suspend the administration to cause these symptoms to all disappear. But in cases of accidental or criminal poisoning, the stomach should be emptied at once with emetics or the stomach pump. If the poison is already absorbed, attempts should be made to eliminate it from the circulation by the use of diuretics, and stimulants should be administered.

(9). In practice, the authors believe themselves authorized to state that trional and tetronal, in small doses ($\frac{1}{2}$ to 1 or 2 grams) may produce in certain cases a good hypnotic effect, but they discourage the use of tetronal in asylum practice, as dangerous, and recommend the usage of trional alternating with sulfonal, but these they advise, in order to avoid the secondary disturbances, to be not prescribed in large doses (2 to 4 grams), repeated or increasing, but on the contrary, following the rule of Mairet, a first large dose to overcome the insomnia, then to lower the proportion of the hypnotic one-half or one-third during the following days, so as to maintain the effect while not incurring the dangers.

(10). As regards the dose, manner and time of administration, the experimental and clinical study of the drug has shown:

(*a*). That the quantity may range from .58 to 2 or 3 grammes, according to the age, sex, and habitude of the patient.

(*b*). To produce a prompt action it may be prescribed cold in suspension in mucilage, milk, wine, tisane, &c.

(*c*). As regards the time, while sulfonal, being slower in its action, should be given one or two hours before retiring, with trional and tetronal one may take the most favorable moment, since, as they act within a quarter or half an hour, the individual already in bed and disposed to favor the beginning of the action of the hypnotic, we are thus able to avoid any disturbance preceding the narcotic action. H. M. B.

MECHANICAL VIBRATIONS IN THE TREATMENT OF NERVOUS AND MENTAL DISEASES.—Morselli, *La Terapia Moderna*, November, 1892, (abstract in *Rev. Gén. de Méd.* No. 51). In this preliminary communication the author publishes the following opinions:

(1). The vibratory method is only capable of exact applications in psychopathies accompanied with localized symptoms, and especially in the insane who suffer from neuralgia.

(2). Melancholia, simple or passive, in its incipiency, melancholia with intercostal neuralgia, insanity with fixed ideas, are the other psychopathies that can occasionally be relieved by the use of the vibrating diapason either over the painful points or on the forehead.

(3). In some cases of hypochondria with occipital neuralgia this means also suffices occasionally in producing a short period of quiet.

(4). In the insomnia of the insane the vibratory treatment will be found altogether inefficacious, while it has some advantages in the insomnia of neurasthenics and hysterical patients.

(5). The effects of this method in the majority of the cases observed by the author were temporary and fugacious, and largely due to suggestion.

(6). Besides its sedative effects, this method may also exert an excitant action on the nervous system, and it is contra-indicated in all forms of mania, in anxious and agitated melancholia, and still more in epilepsy.

(7). The vibratory method is of no value in stuporous conditions, and, equally with galvanic excitation, it is directly dangerous in the insane who have auditory hallucinations.

(8). In his experiments he has found that the apparatus of Baudet of Paris produces an insufficient vibration, and he prefers the method of Mazziorani who uses a large diapason which vibrates on a harmonic sounding board, or rather a diapason of 10 VD. put in motion by an electric pile and always applied only on the points of election preferred in electro-therapy. H. M. B.

SULPHONALISM.—The presence of hæmatoporphyrine in the urine appears to indicate a certain degree of disorganization of the red globules of the blood, and is usually connected with some disorder of the liver or other hæmatopoietic organ. It is a red coloring matter experimentally obtained by the action of concentrated sulphuric acid on the hæmin of the blood, and its clinical importance here is that its presence seems to be one of the results of the continued administration of certain drugs, sulphonal in particular. Two or three recent papers by Salkowsky and Hammarsten have called attention to this fact, which appears to have been noticed as early as 1889 by Stockvis, and in 1890 by Ranken and Pardington. The discoverer of this substance, Neucki, from experiments on rabbits, concluded that it was non-toxic, but Salkowsky believes the contrary as regards the human species. In any case it indicates a considerable general disorganization of the hæmoglobin of the blood. He estimated the quantity eliminated daily in the urine of which he examined samples, as .87 gramme, which would necessitate the disorganization of 18.5 grammes of hæmoglobin or one thirty-second of the whole average quantity contained in the blood.

In Hammarsten's cases it appeared that the red urine followed the long continued use of the drug, in one after 106 grammes had been taken in daily doses of one or two grammes. It regained its normal color nine days after cessation of the treatment. In another 84 grammes had been taken, at the same daily rate, and the urine was of the color of red wine. It was normal after fifteen days intermission of the treatment and again red on its renewal after the administration of six daily doses.

It would seem therefore that we have here a contra-indication to the long continued usage of sulfonal, that it disorganizes the blood, and certainly, in this light, a means of recognizing its over-use. H. M. B.

CONVULSIVE NEUROSES AND MENTAL ENFEEBLEMENT.—X. Francotte, *Bull. de la Soc. de Méd. Mentale de Belgique*, No. 67, December, 1892, calls attention to the apparent connection of mental failure with limited convulsive neuroses, in which he seems to think the motor disorders have a part in the production of the psychic symptoms. He reports three cases of such motor disorder that terminated in almost complete dementia, and in which he believes the convulsive symptoms caused the mental trouble. He bases himself in this opinion on the theory developed by Ribot in his Psychology of the Attention: "that attention is an arrest," an inhibition of all movements foreign to the psychic act. Every one is conscious of the difficulty of reflection while engaged in any action, and, on the other hand, the most expressive statement of the fact in common language of the attention of an audience are such expressions as "you might hear a pin drop," &c. What is the signification of these unless it be that every movement is suppressed? When the attention begins to flag, the audience becomes restless enough.

Attention is the condition of the development of the intelligence and the maintenance of its integrity. This being the case, he asks, may we not admit that chronic convulsive conditions, such as chronic chorea, by embarrassing the attention, favor the failure of the intellect to a greater or less extent? This he offers as a hypothesis to be taken for what it is worth, and says that his observations he has reported, while not directly or absolutely confirming it, are yet easily capable of being interpreted in accordance with it.

H. M. B.

EMMENAGOGUE ACTION OF THE TESTICULAR EXTRACT.—MM. Barnsby and Lallemant reported to the *Soc. de Biologie* at a recent *séance* (*Gaz. Méd. de Paris*) the results of their experiments with this extract. They employed it in female melancholiacs, in whom the effect was *nil* on the mental condition, but in some of the patients, whose catamenia had been suppressed for many months, and in one case for three years, they observed a reinstatement of the function after a very few injections. In a female attendant, amenorrhœic for two years, they produced a copious epistaxis accompanied with pains in the lower abdomen and thighs; they considered this nosebleed as a vicarious menstruation.

They conclude, therefore, that the extract induces an erethism of the organs that give rise to the menstrual flow, and that it has a veritable em-

menagogue action. The editor of the *Gazette Médicale* (M. de Ranse) criticises this last conclusion as a hasty one and suggests that it would be more correct to say that the extract sometimes provokes or favors the erethism of the utero-ovarian apparatus producing as a result the re-appearance of the menses or some other phenomenon. H. M. B.

ACUTE PRIMARY HÆMORRHAGIC ENCEPHALITIS.—Dr. Bücklers, *Arch. f. Psychiatrie*, xxiv. iii, 1892, reports four cases which he refers to this affection, which were observed by him in Bürger hospitals at Cologne. In all of these the diagnosis was verified by autopsy and showed the local acute inflammation of the brain which had been suspected during life from the suddenly appearing highly febrile symptoms. He discusses these cases at length and, though the bacteriological examination in this disorder has so far afforded only negative results, he rather inclined to admit for it a toxic origin. It is not needful that the bacillus should be detected, the poison might circulate in the blood, and it is also well known that the pathogenic organism of some unquestionably microbic affections has not yet been found. In the cases, however, of this disease, a predisposition of the nervous system may be supposed.

The clinical picture of the disorder is a characteristic one. The sufferers are generally young, previously sound individuals that suddenly are seized with severe cerebral symptoms either apoplectiform with unconsciousness, or with an apathetic condition soon passing into coma. There may be a short prodromala of excitation, headache, vomiting, vertigo or psychic depression. An initial chill with rapid rise of temperature is the rule. Then follow important localizing symptoms, such as mono- or hemiplegia, nuchal stiffness, &c. The temperature, pulse, and respiration call for special attention. In two of the author's cases, and in those of Strümpell, the former was constantly elevated and excessive just before death. On the other hand, it is noteworthy that two of his patients had in the beginning no fever, and one of these remained afebrile throughout. The morbid process in both of these was in nearly the same location, the central ganglia, and the suggestion is hazarded that the peculiarity in this regard was due to involvement of the heat centre.

The respiration in the most cases is altered, sometimes full, sometimes weak, sometimes quickened and at other times slowed, without any physical signs of lung trouble. Cheyne-Stokes' phenomenon was observed in two cases.

The pulse frequence is usually increased toward the close. In the author's cases with fever, it was relatively retarded, and absolutely so in the afebrile one. The enormous increase observed by Strümpell was not noted in any of them.

In two of his cases, in spite of the utmost care, bedsores rapidly developed.

As regards the differential diagnosis, the following conditions are to be considered:

(1) *Cerebral hæmorrhage*, which in very severe cases may quickly terminate in death with great rise in temperature. Against this, are the age, which is

usually that in which brain hæmorrhage is rare; also the lack of initial paralysis which only appears later in the disease.

(2) *Embolus.* This seldom causes so high a fever and is usually accompanied at once with paralysis. The cardiac lesions are also of importance to be looked for in this connection.

(3) *Cerebral abscess*, which is frequently latent, may by irruption into the ventricle produce similar symptoms. Also *thrombosis* of the cerebral sinuses with apoplectiform onset and high fever, and lacking, as is possible, the characteristic signs of thrombosis, when met with in young individuals, previously healthy, (or at most chlorotic), may make an absolute diagnosis impossible during life.

(5) *Cerebro-spinal meningitis*, without nuchal symptoms and the eruption, is also a possibility to be considered.

(6) *Influenza encephalitis* and *meningitis* follow an attack of the grip which is the indication for their diagnosis.

(7) *Brain tumor*, which may cause sudden and severe brain symptoms and death in a short time.

(8) Finally the two similar comatose conditions, *diabetic* and *uraemic coma*, distinguished by examination of the urine.

The course of the disorder is generally rapid,—ending in death within a few days. In five of the cases reported so far, the duration varied from twenty hours to four days (Friedman's case.) That it may be slower and have temporary partial remissions, however, is shown by two of Bücklers' cases (I and III), which lasted respectively sixteen and twenty-two days. These support Strümpell's conjecture that there perhaps occur cases with a less apoplectiform character and of more gradual development. The course followed by his case III, with short spells of apparent improvement, suggests the possibility of a partial recovery under specially favorable conditions, such as reabsorption of the extravasation and filling of the cavities with glia tissue. Of course, a functional impairment must be expected to remain. Since, however, this has not been observed, the prognosis must be regarded as unfavorable.

In a short appendix, Bücklers refers to two cases recently reported by Kœnigsdorf and Jul. Schmidt (*Deutsche Med. Wochenschr.*, Nos. 9 and 31, 1892), both of which were subsequent to influenza attacks. Koenigsdorf is inclined to attribute the attack to this disorder. Since the publication of Pfeiffer, in regard to the influenza bacillus, (*Deutsche Med Wochenschr.*, No. 21, 1892), Bücklers has tested sections from his cases I and III according to the method of staining proposed for this bacillus, but with negative result. The brain disorders following influenza, in which Pfuhl (*Berl. Klin. Wochenschr.*, Nos. 39 and 40, 1892) has found the Pfeiffer & Canon bacilli of influenza in the cerebral vessels, do not correspond in clinical features and anatomical findings with primary acute hæmorrhagic encephalitis.

H. M. B.

FOREIGN BODIES IN THE STOMACH AND TRACHEA.—In the *British Medical Journal* of January 7th, 1893, Mr. Cant, of Lincoln, reports a successful gastrotomy performed upon a lunatic for the purpose of removing a

razor, which he had swallowed, from his stomach. In the following case, unfortunately, operation was not permitted; but the history is of extreme interest as illustrating what may be done in the way of swallowing foreign bodies, the tolerance of, or insensitiveness to, such bodies in the insane on the part of normally delicate and highly sensitive surfaces, and the curious pathological changes induced.

The patient, W. T., aged 23, had been a masturbator, and his insanity was perhaps due to this. He had been an inmate of Toronto Asylum for four years and three months, and was considered incurable. His habits, when eating, were such that it was found necessary to place him at a small table by himself, this being within six feet of that occupied by the attendants. The door leading from the dining-room into the ward of which it opened was locked, and the knives, forks, and spoons counted before patients were allowed out. The description of the articles used is as follows:

Knife, 9 5-16 inches long, silver-plated, blunt edge, round point; fork, 7⅞ inches long, four-pronged, silver-plated; spoon, 5¼ inches long, silver-plated.

On the 27th of October last, when the attendants examined the table-ware after dinner, the knife, fork, and spoon used by W. T. were not to be found. When questioned as to where they were, he answered that he had swallowed them. He was not believed, and all of the patients in the room were searched, but without result. The case was reported to the medical attendant at once; but he naturally declined to believe that the articles had been swallowed. The following morning, October 28th, the patient complained of nausea; and the doctor in charge, on examining him, was able to feel distinctly through the abdominal wall some hard foreign bodies which were apparently in the stomach. On manipulation, a distinct clinking noise could be heard. From this time on, until the last week of his life, the patient's condition was very much as it had been previously; and had it not been for the fact that the articles in the stomach could be distinctly felt, it would have been hard to believe that they were there at all. Two or three times vomiting occurred; but as the patient had been troubled the same way for some time previous to the 27th of January, it can hardly be dwelt on as a symptom of any extra disturbance.

On the 12th of November slight abdominal distension was observed, and on the 13th the articles swallowed could not be felt, this being the first day since the swallowing that they were not easily found. On the 14th they were again perceptible; and during the next month (until December 14) the patient's health was apparently quite good, his abdomen showing slight passive distension on the 25th. On December 14th tenderness was complained of, and a gradual increasing distension of the abdomen, which was supposed to be partly due to fluid. Cramps in the right side were complained of on January 13th and 14th; on the 19th vomiting occurred, the rejected matter having a very foul smell. On the 26th of January the patient felt ill, and was put to bed; he vomited frequently, and the bowels failed to move. The pulse became extremely weak, and vomiting continued on the 27th. Death occurred at 1.15 P. M. on the 27th.

Post-mortem examination. An autopsy was held twenty-one hours after death. Inspection showed considerable emaciation; *rigor mortis* and *post-*

mortem staining fairly marked; abdomen greatly distended; columnella of nose separated from alæ for a distance of one-half inch back from anterior extremity (said to be the result of thrusting fingers into nostrils).

Section. Thoraæ: Pleuræ, old adhesions at apices on both sides; lungs tubercular, deposits in upper lobes on both sides, mainly miliary; a few small cavities. In the trachea, just at the bifurcation, was lodged a piece of glass—flat, four-sided, measuring 13-16, 13-16, 4-16, and 15-16 of an inch on the different sides. The edges of the glass were sharp, and it had evidently been lying in its present position for some time; the trachea being pouched out by pressure on the right side, and the mucous membrane scarred; heart small, 7½ ozs., brown atrophy; pericardium healthy. *Abdomen* contained about two gallons of sero-fibrinous fluid; stomach and intestines considerably distended with gas, and their serous coats covered in patches with fibrin. On manipulation of the stomach, it was found that it contained some foreign bodies, which, with knowledge of the previous history of the case, could be made out to be knife, fork, and spoon. On close examination, the stomach was found to be strongly adherent to the ileum and transverse colon, the surface embraced in the adhesions being about the size of a fifty-cent piece; the point at which the stomach was involved was about 1½ inches from the pylorus on the great curvature; ileum, four inches from ileo-cæcal valve; colon, nine inches from cæcum. The handles of the knife and fork could be felt passing down through the ileum from the point of adhesion, and their extremities lodged in cæcum; the bowl of the spoon could be felt in the duodenum, concavity forward, and its tip had caused ulceration through the anterior wall of the duodenum, with a slit-like perforation into the peritoneal cavity, 3½ inches from the pylorus. The stomach and intestines were removed with as little disturbance of relations as possible, and photographs taken with the articles swallowed in the position in which they were found at the autopsy. The point of the knife was engaged in the mucous membrane of the stomach a little below the lesser curve on the anterior wall, and had caused some ulceration there. The points of the fork were free. The handle of the spoon lay across the front of the fork, forming with it an angle of about 45 degrees. The stomach showed marked chronic inflammation—all coats being considerably thickened; the mucosa was much pigmented with black pigment. The mucous membrane of the duodenum was greatly thickened, and showed deep ulceration where the edge of the bowl of the spoon had rested, as well as ulceration with perforation at the point where the tip pressed; the perforation was ¼ inch long; black pigmentation was extreme. No opening was found in the colon where it was adherent to the stomach and ileum. The mucous membrane of the cæcum was slightly thickened, and showed an ulcerated spot ⅜x½ inch, where the knife handle rested. The œsophagus showed superficial ulceration of the mucosa for about one inch above its cardiac orifice. The measurements of the knife, fork, and spoon were found to be as follows: knife, 9¼ inches long; fork 7⅜ inches; spoon, 5⅞ inches. The knife-blade had been considerably eroded by the gastric juice, but the fork and spoon showed no damage beyond the loss of the silver-plating.

There was nothing else specially noteworthy in connection with the abdominal viscera, excepting the presence of a Meckel's diverticulum about two and a half feet from the ileo-cæcal valve. During the whole period of the man's life after he had swallowed the knife, fork and spoon, he only twice—and that only for a short time—complained of pain; and the only sign of peritonitis was abdominal distension. The finding of the piece of glass in the trachea was as great a surprise to the patient's medical attendants as to others. There had been nothing at all during life to cause them to suspect any foreign body or any irritation whatever in the respiratory tract. — Reported by Drs. John Caven and Thomas Weir in *Canadian Practitioner.*

CRUELTY AND PITY IN WOMAN.—Generally speaking, woman, even at the very beginning of human evolution, is less cruel than man. Yet on occasion, and especially when revenge is the motive, woman sometimes shows an "ingenuity in slowly tormenting her victim, in gloating over his sufferings and lengthening them out in order that her enjoyment of vengeance may endure as long as possible" that man never equals. Such cruelty is usually directed against those who have wounded her in her deepest and tenderest sentiments, but sometimes also against the helpless, as her slaves. Again, during periods of great national excitement, as the French revolution, feminine cruelty sometimes becomes epidemic.

Notwithstanding these contradictory facts, the sentiment of pity is really much more keen in women than in men. Cruelty springs from weakness. "Woman not being powerful enough to destroy her enemies, had to seek for means of defending herself by wounding their more delicate organs, by inflicting such acute pain as would serve to disable them. Other weak animals are also cruel."

Pity is an offshoot of the altruistic maternal function; another factor being, also, "woman's own weakness, and her lower intellect." We appreciate those sufferings which we have ourselves experienced, and woman is called on to suffer far more pain than man through bodily illness. Again, woman's sensibilities have not been blunted to the same extent as man's by the struggle for existence, which involves the pursuit of one's own ends, irrespective of the ills entailed on others. Yet again, love for man, taking the characteristic form of self-abnegation and devotion, has developed the sentiment of pity; since nothing is easier than for woman "to spend this treasure of devotion" vicariously, when she has not found the man on whom to lavish it. "The close relationship between pity, maternity, and love is shown by the fact that the heroines of charity are almost always widows without sons, or unmarried women."

"Woman loves, hates, consoles, inflicts pain, according as she finds herself in the presence of a friend, an enemy, a helpless being or of a rival." But her instability of equilibrium is lessened by evolution, and pity becomes stronger than cruelty. Among civilized nations, the sentiment of cruelty in women becomes simply a moral attitude. The diminution of muscular strength is in itself favorable to the softening of female character. Sexual selection also aids this, since man "shrinks instinctively from meeting in a woman a high degree of the qualities which he himself possesses." Physical

grace also plays a part in the evolution of the gentler sentiment, because of mutual correspondence between the emotions and their outward manifestation. "Each graceful expression of the countenance has a tendency to throw the mind into some sweet and peaceful condition:" hence culture of the physical graces has been an exercise of goodness.

Since, then, evolution is carrying woman away from cruelty and toward pity, the author reaches the very hopeful conclusion that "in ages to come, woman will become entirely good."—Guillaume Ferrero in *The Monist*, January, 1893.

PACHYMENINGITIS INTERNA HÆMORRHAGICA.—Bondurant reports eight cases of this affection occurring in the Alabama Insane Hospital. In only one were there any symptoms pointing to the nature of the lesion during life. All had more or less atheromatous degeneration of the arteries, and all but one renal disease. There was well-marked atrophy of the brain in all cases.

From his examinations, both gross and microscopic, of the membranes, he concludes that the lesion is primarily hæmorrhagic, and not inflammatory. In the recent cases, little or no vascular connection could be discovered between the membrane and the dura mater, and there were no appearances pointing to an inflammatory condition in any of the cases. The uniform coincidence of arterial disease favors this view. One of his cases was of, strictly speaking, a hæmatoma of the dura mater; the hæmorrhage, apparently recent, was in the subarachnoid space. From this he infers that in the condition under discussion the source of the bleeding is the vessels of the pia rather than of the dura—a conclusion that does not seem necessarily to follow.—*Alienist and Neurologist*, January, 1893. W. L. W.

EXPERIMENTAL HÆMATOMA OF THE DURA MATER.—Goodall had occasion, in the course of some experiments, to apply brandy or diluted cantharidin to the cerebral surface in rabbits. In one of the animals so operated on, 48 hours after the application, the inner surface of the dura mater was found to be lined with a dark clot, having no connection with the subjacent tructures. This was found, on microscopical examination, to consist of red and white corpuscles—the former predominating—fibrin, and an amorphous substance. Brandy was the irritant used in this case. In none of the other animals was there any exudation. He believes the clot to have resulted from the wounding of some vessel in opening the dura, and thinks that with time it would have become organized—in other words, that it represents the earliest stage of hæmatoma.—*Journal of Mental Science*, July, 1892. W. L. W.

DIAGNOSIS OF SPINAL-CORD LESIONS.—Peterson gives some convenient diagrams for reference in the localization of lesions of the spinal cord, both with respect to the systems of fibres involved, and the level at which the lesion is located.—*Medical Record*, November 12, 1892. W. L. W.

THE TOXIC ORIGIN OF INSANITY.—Kellogg proposes the following classification of insanities of toxic origin:

I. From mineral poison and certain drugs:—lead, mercury, arsenic, chloral, bromide of potassium, iodoform, paraldehyde.

II. From vegetable poisons:—opium, belladonna, cannabis indica, hyoscyamus, stramonium, tobacco, cocaine, conium, astragalus hornii, secale cornutum.

III. From intoxicants and noxious gases:—alcohol, ether, chloroform, carbonic oxide, sulphurous acid.

IV. From eruptive fevers, diathetic states, and other diseases:—typhoid fever, small pox, scarlet fever, intermittent fever, rheumatism, gout, lithæmia, puerperal state, la grippe, cancer, syphilis, tuberculosis.

V. From auto-intoxications.

He briefly touches on the characteristics of the insanities excited by these various agents.—*Journal of Nervous and Mental Diseases*, October, 1892.

W. L. W.

PHTHISIS AS A NEUROSIS.—Mays takes the ground that pulmonary consumption is a nervous disease. He cites the well-known fact that it is specially frequent among the insane and idiots, and constructs a chart, based on statistics of the two conditions, showing a close correspondence between the ages of their greatest prevalence. Both are considered to be hereditary, and a tuberculous parentage is thought to predispose to insanity, and *vice versa*. Asthma is another neurosis, in the author's view, intimately connected with phthisis. He quotes cases of asthmatics in whom the disease alternated with attacks of insanity, and others who died from consumption. Phthisis is not only extremely frequent among idiots, causing, according to Down's experience, 398 deaths out of 1,000, but also among the families from which they spring. Kerlin found that out of 100 such families 145 members, not including uncles and aunts, were afflicted with pulmonary consumption, 25 with insanity, and 21 with epilepsy. Down and Grasset have published statistics to the same purport.

He believes that lesion of the pneumogastric nerve is the exciting cause of phthisis, supporting this view by the pulmonary lesions produced by experimental section of these nerves, and by histories, published in a previous article, of 81 cases in which consumption was associated with disease of the vagus.—*Medical News*, July 16, 1892.

W. L. W.

SUICIDE AND THE LAW.—Before the Society of Medical Jurisprudence last evening, meeting at the Academy of Medicine, 17 West Forty-third Street, S. B. Livingston read a paper on "Suicide and Recent Re-actionary Legislation." His treatise reviewed the manner in which suicide had been regarded by ancient and modern peoples and the various legal measures that had been resorted to to prevent the act. The criminality of suicide, he said, became firmly established with the Christian era, being born of the belief that man's life was not his own. Mr. Livingston said he was forced to the conclusion, however, that no legislation had ever tended to prevent suicide. The theory of the old English common law, which has long been abandoned,

was that suicide could be deterred by confiscating the estate left by the suicide and submitting the body to such disgrace as exposing it to public view and then burying it at the cross roads with a stake driven through it. The theory of the Penal Code of New York was that suicide would be deterred by punishing as felons those who attempted to take their lives and failed. This, he thought, had no other result than to make those who contemplated suicide surer of their method. Furthermore, he thought, the law was a dead letter, as he had never heard of the conviction of an attempted suicide under it. Dr. E. C. Spitzka, in the discussion which followed, said that he regarded laws to prevent suicide as relic of barbarism. Their absolute uselessness had been fully demonstrated, and they might work injustice. He corrected Mr. Livingston in his statement that an attempted suicide had never been punished under the New York law, by relating that just after the law was passed, in 1881, a poor longshoreman named Donohue, suffering from delirium tremens, had jumped into the river. He was fished out, and his being the first case after the passage of the law, he was sentenced to State prison and was there yet. No other attempt to convict had ever been made.—*N. Y. Times*, February 14th.

Isotonia of the Blood in the Insane.—Agostini, *Rivista Sperimentali*, XVIII, III and IV, has investigated the blood of some two hundred insane in regard to its globular resistance to solution, which has been termed isotonia by Hamburger. He finds that in most maniacal conditions the isotonic power is rather diminished, the proportion of hæmoglobin inferior to the normal, and the number of red globules nearly physiological. In depressive insanity, idiocy, and post-hemiplegic dementia, isotonia is slightly lowered, hæmoglobin more frequently and seriously diminished, and the percentage of hypoglobulie notably increased. In the toxic forms these conditions are still more marked and among them pellagra takes in all particulars the first place, though in some few instances the conditions, even in this disease, are found nearly normal.

In periods of agitation, especially if prolonged, in epileptics, hysterical cases, paranoiacs, and dements, and often apoplectiform and epileptiform attacks, the isotonic power is reduced, while the proportions of hæmoglobin and the red corpuscles are but slighty affected.

In typical paralytic insanity the isotonic power is little altered, the hæmoglobin and number of globules normal in most cases, while all are diminished in the periods of prolonged excitement of this disorder.

In imbeciles, epileptics, hysterical cases, paranoiacs and dements, under ordinary conditions, the isotonic power, globular richness, and hæmoglobin vary only within the physiological limits in the majority of cases.

The Finer Structure of the Spinal Cord.—Mingazzini, *Rivista Sperimentali*, XVIII, III and IV, publishes the results of his investigation of a large number of sections of the spinal cord in a case of amyotrophic lateral sclerosis, and the following are the conclusions of his memoir:

(1) That the nervous network (*intreccio*) of the anterior cornua (except in its median portion) is formed almost *in toto* of the terminal fibrils (collaterals

from the pyramidal bundles) that place in relation the cerebro-spinal and spino-muscular segments of the pyramidal tracts.

(2) That all the groups of the anterior (and lateral) horns have the significance of motor elements; but the median and ventro-lateral are in relation only with the collaterals from the pyramidal bundles; while the postero-lateral group is in relation not only with these collaterals, but also with the terminal extremities of the sensory collaterals of the posterior root fibres which extend with their terminal extremities to be in correspondence with the base of the anterior cornua.

(3) That the anterior commissure is formed of two parts: one dorsal, formed by the crossing of a portion of the posterior root fibres, and a ventral, formed, in part at least, by the prolongations of the cells of the anterior horns and the anterior root fibres.

CHLORALOSE.—This is the name given by Hauriot and Richet, *Gaz. Méd de Paris*, No. 4, 1893, to a substance made by the combination of chloral and glucose, anhydroglucochloral. It is prepared by taking equal parts of the two substances and heating them together to a temperature of 100 C. (=212 F.) for one hour. By cooling it forms a thick mass which is treated first with a little water, then with boiling ether. Taking then the part soluble in ether and adding water and distilling it five or six times with water till all the chloral has been dissipated, there is finally obtained a residue, from which by successive crystallizations are obtained a substance, (*a*,) slightly soluble in cold and rather freely soluble in warm water and alcohol, and another substance (*b*,) hardly soluble in warm water. The body (*a*,) which the authors call chloralose, crystallizes in fine, needly crystals and responds to the formula $C^8\ H^{11}\ Cl^3\ 0^6$.

This substance has the peculiar physiological properties of being at once a hypnotic, and increasing spinal excitability. Its poisonous properties are *nil*, according to the authors, while its hypnotic action is much more active than that of chloral. From clinical experiments made by MM. Landouzy and Moutard Martin in cases of obstinate insomnia they deduce the following:

1. Chloralose can be given safely in doses not exceeding .8 gram (=12 grains), and causes on awaking no digestive disorder, cephalalgia, or phenomenon of intoxication.

2. A dose of one gram is a large dose. It is better to employ doses ranging from .2 gram (minimum) to .75 gram. Half a gram produces a profound and quiet sleep, even in cases rebellious to other hypnotics.

At a recent *séance* of the *Soc. de Biologie*, February 28, (*Progr. Méd.* Nom. 4), M. Fere reported that he had given as high a dose as two grams and a quarter (2.25 grams) to hysterical cases. In this quantity, however, it causes stertorous breathing and involuntary emission of urine. When administered to choreics its effects were the same as those of chloral.

BOOK REVIEWS.

New York State Reformatory at Elmira. Seventeenth Year Book, containing the Annual Report to the Board of Managers. For the year ending September 30th, 1892.

It is seldom that one can turn the pages of a book from cover to cover with unmixed satisfaction: but here is one of which this may be said most unreservedly. And having said it, we feel that the word is far too weak. We have felt not merely satisfaction, but enthusiasm,—enthusiasm such as no book has brought us before for many a day. And why? Not because of a masterly style—though the book is written clearly and well; not because of the mechanical construction—though this is worthy of much praise; in short, not merely as a book has this work aroused our enthusiasm, but as a record of what may be termed without euphuism, splendid achievements. With all our boasted enlightenment, we are living in an age when dark social clouds hang over us more threateningly than at any time in the past. Not the least of these, and in close contact with all the rest, is the cloud of crime. The humanitarian may well stand aghast when told that, with all our enlightenment, with all our progress, the class of our population that is increasing fastest is the criminal population. What does it mean? he may well ask. It means that we are still walking for the most part in the dark. It means that the great science of Sociology, in which all other sciences culminate, is but in its infancy. It means—to adopt the baleful words of the fanatic—that something is radically wrong. It means—and let the fanatics from whom we have just borrowed mark well these words—that Thoreau was right when he said that there are ten thousand people hacking at the branches of the tree of Evil where one strikes at its root. No wonder then that we hail with enthusiasm the record of workers who are striking at the root of the great far-spreading tree of crime. This is precisely what is being done at Elmira. It is unfortunate that the report in which the record of this work is given cannot find a far wider circulation than is practicable. It ought at least to be in the hands of every legislator in the land, for in matters of criminology, most of these legislators seem strangely blind to the signs of the times. It is the cry of practical penologists everywhere that our only hope, so far as present wisdom can see, in dealing with crime, lies in the line of indeterminate sentences and a parole system such as has been for the past seventeen years in operation at Elmira. It is not a perfected system, it is true, but a developing system already far in the van of the old methods. All honor is due the Empire State for taking the initiative, on this side the water, in this grand progressive movement. But what shall we say of the sister States? For eight years, there was no response; then Massachusetts awakened. Five years more, and Pennsylvania, Minnesota and Colorado fell in line. In 1891 came Ohio and Illinois. And the rest? Well, the leaven has been applied and in time it will leaven the whole loaf. *In time:* but is this the boasted age of electricity, or do we still hear the rumble of the stage coach?

Turning to the specific matter of the report before us, space forbids any such detailed notice as it deserves. We can only glance at a few salient features. First, as to the class of prisoners under consideration. "The law requires that to be eligible to the reformatory the prisoner must be between sixteen aud thirty years of age, aud must not be known as a recidivist. The appearance of the prisoner at the bar of justice often influences the magistrate in determining the sentence, but more dependence is placed upon the statements of witnesses who testify to the young man's character and upon the assurances and prayers of parents or friends who implore the judge to save the culprit from the ignominy and utter disgrace of a term in State prison." It is but fair to say, then, that the reformatory has to deal with the most hopeful class of criminals. But lest a wrong inference be drawn from this, consider for a moment some statistics as to the condition of the prisoners on admission. Since the opening of the institution, 5,889 prisoners have been admitted. In 12 per cent. of these cases (omitting fractions) a heredity of insanity or epilepsy was traced; 44 per cent. of the ancestors had no education or could barely read and write; 82 per cent. were paupers or lived from hand to mouth. Of the inmates themselves, 68 per cent. on admission were absolutely illiterate or could merely read and write with difficulty, and 98 per cent. came from associations either not good or positively bad. Of even greater significance are the inferences to be drawn from the physical, mental, and moral condition of the inmates on admission; 88 per cent. were adjudged to be in good health; 80 per cent. gave evidence of good or excellent natural mental endowment (though only 24 per cent. had an ordinary degree of culture); but of "moral sense, even such as shown under examination, either filial affection, sense of shame, or sense of personal loss, 40 per cent. had absolutely none, and 36 per cent. possibly some,"—leaving only 24 per cent. who were of ordinary moral sensibility! Not so promising a class after all, it would seem.

But note now the most hopeful feature of the entire subject. It appears, notwithstanding the bad heredity, that the moral obtuseness of these delinquents is after all not so much inherent deficiency as undevelopment. For we find presently that there is a class in ethics in the "school of letters" of this most unconventional prison, and that it numbers some 450 pupils, among whom there must be many who, a few months before, might have been classed as "moral imbeciles." And now we find them discussing, with surprising intelligence, to judge from some examples given, such questions as the following: "When does the indulgence of an appetite violate the laws of nature?" "Is there any sin in our desires?" "Is it ever right to refuse obedience to a human law?" and others in kind. Then we are told of a newspaper conducted by inmates, in which moral, social, educational, scientific questions are discussed. Inmates furnish the "copy;" inmates prepare the illustrations; inmates set the type; in short, it is an inmates' journal in fact as well as in theory. How well the work is done we may judge, for the book before us, with its admirable typography and creditable illustrations, is also, in all its mechanical features, the product of inmate skill. Yet again, we read abstracts of scientific lectures delivered by inmates to their fellows.

And then we ask, is this a prison or a college? And the answer is, it is somewhat of each and more than either. Prisons, under the old system are nurseries of crime. The reformatory is not a prison in that sense. Colleges give to developed minds a theoretical veneering that is often useful but seldom absolutely essential. The reformatory is not a college in that sense. But it is a prison in that its inmates are delinquents whose infringements of law have taken from them for the time the right of personal liberty; it is a college in the best sense in that its mission is the development of the minds and bodies of a defective class. Ethics and journalism and oratory are not alone its curriculum. Here is also a kindergarten for pupils who are men in years but infants in mental development. And here are classes in blacksmithing, carpentry, bricklaying, tailoring, cooking, plumbing, and the like, as well as in fresco-painting, engraving, stenography, and practical electricity. Then, hand in hand with the school of letters, and the industrial schools, there is a military organization, insuring the physical development of the mass of inmates; and, better yet, a splendid system of discriminative physical development, under the management of Dr. Hamilton D. Wey, with results that speak for themselves in the series of photographic plates shown in this volume. Here, in short, is an institution where the criminal is treated as an individual, where each inmate is treated according to his needs, where the idea of punishment has disappeared and the watchword "development" has been substituted; where the pupil is encouraged to live better and better in reality, while learning how to see better and more clearly into the theory of living; where discipline when necessary is not withheld but is always corrective, never retributive. In a word, it is an institution of the most scientific kind, because it strives to make its artificial environment imitate as closely as may be the natural environment of the outside world. Its one aim and object is to prepare its inmates to be useful, honest, self-supporting, law-abiding citizens.

Does it accomplish this result? After all, that is the only important question. Not always, of course; but the management believe and give reasons for believing that in more than eighty per cent. of the cases this result is achieved. That is to say, there is reason to believe that in the short history of this one institution, there have been rescued within its walls from the ranks of perpetual crime, and added to the useful, productive element of the population, 2,689 souls! Even if this estimate errs by half, what a grand, what a magnificent work is that! Remember that this is only the estimate of individuals directly rescued; remember that each one of the more than two thousand would, if unrescued, have been a focus from which criminal tendencies would have radiated in all directions,—through contact, through example, through precept, through progeny; and it will then be plain that to rescue 2,000 persons from habitual criminality to-day, means the reduction of the criminal population of the next generation by many times 2,000. Is it strange then, that we grow enthusiastic as we review the record of this work? Say rather it would be strange if we could review it without enthusiasm. All honor to every man who has helped in this good work!

In conclusion, we may quote the hopeful words, which are placed at the

close of this book by the General Superintendent, Mr. Z. R. Brockway, to whose intelligence, zeal, judgment, and earnest faith the success of this institution is due :—"The time will come when every punitive institution in the civilized world will be destroyed and all places for the treatment of crime be hospitals, schools, workshops and reformatories." Speed the day !

H. S. W.

Traitement de la Syphilis.—Par ALFRED FOURNIER. Professeur à la Faculté de Médecine, Membre de l' Académie de Médecine, Mèdecin de l' Hôpital Saint Louis. Paris: Rueff et Cie. [The Treatment of Syphilis, by Alfred Fournier].

This is a book of six hundred octavo pages, on the treatment of one disease by two remedies. Written in the form of lectures, it is naturally more diffuse than would be expected in a formal treatise, and the positive directions contained in it might have been compressed into a much smaller compass, but we doubt if the reader who is interested in the subject will find much that he will wish to skip. The author speaks from a general and hospital practice of thirty-two years as a specialist, comprising thousands of cases, and the results of this immense experience are imparted in an easy and forcible style, more common among medical writers of his nationality than elsewhere. He has very decided convictions in regard to many of the mooted points connected with his subject ,upon which he naturally speaks with authority.

The two remedies in which he places his confidence are, of course, mercury and iodide of potassium, although he has recently had some encouraging results from hypodermic injections of serum of immune animals. All other drugs, so far as specific influence upon the disease is concerned, he considers inert. The form, the time and the manner of administration of these drugs are the matters of prime importance in the treatment.

As regards mercury, he prefers, unless there are special indications to the contrary, to administer it by the mouth, and the preparations which he prefers for this purpose are the protiodide and the bichloride. Of the two, he gives the preference to the former, on the whole, for the earlier stages especially, although both have their advantages and drawbacks. The protiodide is better tolerated by the stomach, but more likely to produce salivation. He thinks both preparations are often given in too small doses, and that such administration may be a positive detriment to the patient, by inducing a toleration of mercury that will hinder its full effect when administered in its proper dose. The average daily dose of the protiodide for an adult man he thinks should be from 10 to 12 centigrammes; of corrosive sublimate, three centigrammes. For women, the average dose is about two-thirds of that for men. These doses are subject to a pretty wide range of variation, with respect to the tolerance of the patient and the obstinacy of the symptoms. Inunction has its place in cases in which the drug is not tolerated by the stomach, or when saving of time is an important matter. For infants it is the only practicable method. The inconvenience of the process, and the danger of intense salivation, greater than in any other method, make it unsuitable to the ordin-

ary run of cases. The indications for the hypodermic use of soluble preparations of mercury are somewhat the same as for the inunction, but its action is much less intense. The method of infection of insoluble preparations in large doses at considerable intervals, he considers too uncertain and dangerous, and mercurial fumigations offer no advantages over more convenient methods, while the danger of inhaling the fumes is a serious one.

The iodide of potassium is the remedy par excellence for tertiary symptoms. The author is not in favor of so large doses as have been recommended by some American writers. Three grammes per diem for a man, and two for a woman, he considers an average dose. In urgent cases, from ten to twelve grammes may be given in the twenty-four hours, if smaller doses do not answer the purpose. He has found no gain in therapeutic effect from larger doses than these.

When it is desirable to use the two drugs simultaneously, he prefers to administer them separately, at a short interval, rather than in the same mixture.

He is no believer in a course of expectancy at any stage of the disease. In his opinion, the administration of mercury should be begun in the primary stage, as soon as the diagnosis is certain. He condemns, however, the practice of giving mercury in cases in which the character of the sore is doubtful, as, by preventing the early development of secondary symptoms, it may leave physician and patient in a state of very undesirable uncertainty as to the real nature of the case. Mercurial treatment should be continued vigorously, with intermissions, of longer and longer duration, for at least two years from the date of infection, and he thinks it the part of prudence to take a semi-annual course of iodide of potassium for three years or more after this time.

The results of this course have been, in his experience, incomparably superior to those attained by the plan of awaiting the development of symptoms and treating them as they arise. In the great majority of cases, the patients have escaped all serious manifestations of the disease. At the same time, it had its undeniable failures. There are cases that are refractory to every method of treatment, or in which, no sooner is one manifestation of the disease abolished by energetic treatment than another breaks out. Of another order are what he calls parasyphilitic manifestations, of which the most important are tabes and general paresis. Although he considers it doubtful whether or not these diseases are syphilitic in their nature, he believes it unquestionable that, in a great proportion of cases, they are in some way the results of syphilis. In these cases, the early history of the disease is usually benign, and the nervous symptoms make their appearance after a long period of exemption.

The author does not allow his zeal for specific treatment to blind him to the importance of hygienic measures and of a most careful and thorough investigation of the patient's state of health in every respect. Especially does he emphasize this in respect to the nervous system, which is the most vulnerable point for tertiary lesions, and the field of the greatest disasters. Among 3,429 cases of tertiary syphilis he found the nervous system involved in 1,085. He is convinced that nervous crethism, whether inherited or the result of ex-

cessive function, has a most important influence in determining the incidence of these lesions, as well as the parasyphilitic diseases. As a prophylactic measure, he urges, especially for those who are disposed to nervous troubles, the avoidance of every form of excess that can bring a morbid strain upon the nervous system.

He concludes by urging the importance, in every case, before dismissing the patient, of acquainting him with the possibilities in regard to the remote effects of the disease, and the importance of perfect candor with his physician in this respect, in any future illnesses, lest the nature of obscure symptoms should be misunderstood.

Etat Mental des Hystériques. Les Stigmates Mentaux. Par Dr. PIERRE JANET, Professeur Agrégé de Philosophie, etc. Paris: J. Rueff & Cie, Editeurs, 106 Boulevard St. Germain.

This is another of the books which have appeared in that useful series known as the Charcot–Debove collection. It is a small octavo of 233 pages, flexibly bound, and having the attraction of typographical neatness.

The work is presented to the medical public with a word of introductory commendation by Charcot, in whose service at the Saltpêtrière the clinical studies of the subject were chiefly carried out.

The author, as a physician, as a pupil of Charcot, and as a professor of philosophy at the Collège Rollin, would seem to combine in a fortunate way both the medical and metaphysical knowledge essential for the study of hysteria, which modern science regards as essentially a psychosis.

The constitutional and permanent mental symptoms of hysteria are generically termed mental stigmata and form the subject of the present work, and the less fundamental and accidental psychical phenomena of the disease are to be presented in a second volume.

The book is based on one hundred and twenty cases of hysteria studied by the author, and twelve cases communicated to him by others. Modern tests and instruments of precision were employed in the observation of these cases.

The author, with the lucidity characteristic of most French medical writers, makes a clear division of his subject, which he discusses under the following headings: 1, Anæsthesias; 2, Amnesias; 3, Abulias; 4, Disorders of movement; 5, Modifications of character.

In the discussion of all these varied groups of symptoms the author shows competent familiarity though not perfect mastery of his subject, for in the present *status in quo* of medical science there is perhaps no one sufficiently master of this protean disease to rationally explain all of its illusive forms.

Some of the author's special views show analytic acumen while at the same time they leave ample room for skeptic questioning, and they would seem inevitably to have received a certain bias from the school from which they emanate. There is no more thorough school of neurological science than that in which these studies were completed, but for want of similar material or of other parallel conditions, some of the clinical observations of this school on hysteria have not been confirmed in other scientific quarters.

It is possible that similar hysterical types do not exist in this country, and it is not impossible that they might emerge tangibly if a large number of hysterical patients were grouped and systematically studied together for a long period of time in one hospital, for such things as educated types of disease do exist.

The main conclusions of the book, however, are reached by skillful methods, and are not to be gainsaid. They are substantially to the effect that there are in hysteria losses of general and special sensation—defects of memory—diminution of will power—loss of voluntary motion—changes in disposition—feebleness of thought—fixed ideas—diminished personality and a narrowing of personal consciousness, and general intellectual and emotional instability—that all these symptoms are due to psychical causes rather than to physical lesions, and that they are singularly modified or controlled by hypnotism, electricity and other external stimuli, by the will of the operator and in general by mental therapeutics.

It is a mistake in a complete monograph on such difficult and deceptive symptoms as those of hysteria to neglect to mention all points of differential diagnosis, or tests which may aid in the exclusion of error.

It might have been well to have said something of the use of metallotherapy as a differential test, of the relief of achromatopsia by metals, and of tests used years ago when the writer saw Charcot demonstrate that the loss of the perception of colors was in the order of violet, green, red, orange and blue, and that an inversion of this order suggested deception on the part of the patient. Nothing is said of Graefe's prism test in unilateral amaurosis, or of tests for the concentric narrowing of the visual field, or of etherization and the arousing of the patient by loud calls in pretended hysterical deafness. Under the head of hysterical contractures no allusion is made to the differential diagnosis from hip-joint diseases or other positive affections. Hysterical amnesias and other lesions of memory might have been more completely treated in view especially of the fact that there has been for years an excellent French monograph on the subject, viz.: "Maladies de la Memoire, par Ribot." There is no description of hypermnesia or of any of the heightened actions of the special senses which unquestionably exist in some cases of hysteria.

The use of hypnotization in the experimental observation and treatment of hysteria admits of abuse, and there is such danger of injury from this source that it would have been well timed for the author to have raised a voice of warning on this score for the benefit of less experienced observers than himself. Some of the more recently studied hysterical phenomena are omitted or dismissed too briefly—such as the monoplegias resulting from amyosthenia—the interesting symptoms of allochiria and allokinesia. In fact this criticism of the faults of omission might be considerably extended, but suffice it to say in a word that a monographic work should always be exhaustive of the subject of which it treats.

It may have been a spark of Gallic chivalry to champion the cause of the defenceless which led the author to assert that eroticism and mendacity are not real traits of hysterical patients, or possibly this view was expressed as a wholesome check to those who are wont to regard salacity and decep-

tion as personified in every hysterical woman. The truth lies between the two extremes.

It is a pleasure to turn from these criticisms to those parts of the work which are deserving of every praise.

The author shows himself to be a thorough student of psychology. He has given an able analysis of the complex elements which constitute personal identity, and has also given a capital description of the processes by which the field of personal consciousness is gradually narrowed in hysterical patients. He has shown in a most capable manner the relation of the organic sensations to the emotions, and of the fundamental appetites to the will, and also how the egoistic feelings come to completely displace the altruistic sentiments in hysterical subjects. He has traced, in a most clear and interesting way, in neurotic and predisposed persons, the natural history of cases of hysteria through the formative stage previous to eighteen years, into the stage of complete evolution, in middle life, up to thirty years, and on into the final and terminal period of advanced age.

The clinical symptoms are all drawn by one having perfect familiarity with the subject as well as unusual descriptive powers.

The work taken as a whole is highly creditable, and it is recommended to all students of the psychic symptoms and philosophy of hysteria.

T. H. K.

Epitome of Mental Diseases, with the Present Methods of Certification of the Insane, and the Existing Regulations as to "Single patients," for Practitioners and Students. By JAMES SHAW, M. D., Qu. Univ., Irel., Master of Surgery; Member of the Medico-Psychological Association; Formerly Medical Superintendent and Colicensee, Haydock Lodge Asylum, Lancashire; Assistant Medical Officer, Grove Hall Asylum, Bow, London; Assistant Medical Officer, Norfolk County Asylum. New York: E. B. Treat, 5 Cooper Union. 1892. [12mo., pp. xii, 345.]

The author, in his preface, states the intention of the book as "a handy and practical book of reference for general practitioners, and to serve students as an introduction to the more comprehensive treatises and exhaustive monographs." In our opinion, such value as works of its class have is confined to the former of these objects. A judiciously arranged and selected compendium may be a help to the busy practitioner in recalling to mind facts which he has previously learned in their natural connections. For the student to make the reading of such a work the preliminary to the systematic study of the subject is, we believe, a positive disadvantage, tending to give him erroneous ideas of the bearing of facts which can only be appreciated in their mutual relations. Our meaning can be illustrated by a few selections from Chapter II.—"Index of Symptoms Somatic and Psychical, with the Mental Diseases in which they occur."

"Activity, Unusual and Useless.—In the prodromal period of general paralysis."

"Annoyance at Trifles.—In incipient climacteric insanity."

"Attitude Immobile.—In simple melancholia."

"Conduct, Extraordinary.—In moral insanity."

"Delirium with Remissions.—In insanity of Bright's disease."

"Dulness and Indifference.—In choreic insanity."

"Injuring Husband and Children.—In puerperal insanity; climacteric insanity."

"Manner, Foolish.—In simple mania."

"Remorse.—In climacteric insanity."

This chapter, according to the recommendation of the author, should, for practical purposes, be taken up first. We doubt very much if the student, by committing it to memory, would have a very definite idea of any of the forms of insanity mentioned in it, and if he assumed that, because he found one of the symptoms mentioned above, he had a case of the form of insanity with which it is coupled, he would run a risk of going pretty far astray. After mastering some standard work on the subject, the perusal of a book like this might serve to refresh his memory, and also to direct his attention to the fact that insanity is one of the subjects on which "doctors disagree."

The book is, confessedly, in the main, a compilation. The authors whose works have been consulted are of acknowledged authority, and the author's experience among the insane has been of evident service in selecting the topics to be treated.

We think the book, considering the nature of the subject, a good specimen of its class, but the class is one which, for reasons indicated above, we do not hold in very high esteem.

Handbook of Insanity, for Practitioners and Students. By THEODORE KIRCHHOFF, Physician to the Schleswig Insane Asylum and Privatdocent at the University of Kiel. New York: William Wood & Company, 1893.

The simultaneous publication of the two excellent treatises by Dr. Kirchhoff and Dr. Stearns, respectively, is an auspicious beginning of the current year in psychiatry, and emphasizes the contrast in the interpretation by the authors of the requirements they seek to meet. Dr. Stearns' lectures, developed upon intimate acquaintance with the assumed want, will probably prove more acceptable to American practitioners and students. Dr. Kirchhoff presupposes a preliminary training in psychiatry, which does not generally obtain in this country, and his book will find more readers among specialists than among the general practitioners for whom it is stated to have been written. This criticism is especially applicable to the first or "General Part," consisting of seven chapters, wherein are discussed "The Anatomical Basis and the Location of Mental Disturbances;" "Classification, Importance, and Mode of Action of the Causes of Insanity;" "The Signs of Mental Disorders;" "The Course of Mental Disorders;" "The Diagnosis of Mental Disorders and their Border Lines;" "The Treatment of Insanity;" and "History of Psychiatry." The consideration of the psychophysical basis of insanity is less likely to attract the practising physician than is the conservative judgment upon hospital methods and procedures, many not yet removed from the field of psychiatric contention.

In respect of gynæcological examinations the author thinks it "better to do too little than too much, and they should be made only when there is definite indication." (p. 136). He thinks the "physician should always avoid

answering the question, so often put by the judiciary, as to the responsibility of a patient, and should confine himself strictly to the question of mental health or disease." (p. 147). He deprecates treatment which looks for "a cure in distractions," recognizing the relief that follows "conversation, the theatre and concerts, as generally fleeting. * * * It is dangerous to subject a fresh psychosis to constant bodily and mental restlessness." (p. 152). He regards chloral as the best hypnotic, and favors its occasional combination with morphine. He has found paraldehyde the most satisfactory substitute for chloral. Sulfonal meets his approval because of its tastelessness. "Its action varies greatly in different individuals. An eruption resembling that of measles is observed occasionally after its administration. In several old, marantic individuals, the urine for a long time had a Burgundy-red color and hæmoglobinuria was present; in one case this disappeared after the discontinuance of the drug." (p. 159). He advises delay in forcible feeding, under favorable circumstances waiting "two weeks or more." He prefers the soft nasal catheter, "as the mouth can be opened, in many cases only by brute force." (p. 163).

Of restraint he writes: "The tendency of the present time is the avoidance of all mechanical restraint, and it may be dispensed with if the attendants are sufficiently numerous and well-trained, and if strong drugs are resorted to. In rare cases, however, it would be fanatical to dispense with restraint; for example, in cases of severe injury, in restless patients, which can only heal when rest is enforced. Or mechanical restraint may be necessary in conditions of exhaustion, because drugs would still further injure the exhausted nervous system. In incurable cases we may use chemical restraint, out of deference to the feelings of the family, but in recent cases there is danger of chemical injury to the brain." (p. 165).

The "Special Part," comprising the second half of the volume, consists of three chapters, outlining the clinical manifestations of insanity. In the first chapter, an "artificial" scheme of classification is adopted, merely as an attempt "to furnish a rapid survey of the essentially different clinical forms." The second chapter, under the caption of "Simple Mental Disorders," gives descriptions of Melancholia, Mania, and their Periodical Forms, including Circular Insanity, and Paranoia. The description of Paranoia comprehends the three varieties, Wahnsinn, Verruecktheit and Confusion. Wahnsinn is a "mental disorder in which delusions and hallucinations are rapidly combined into a composite whole, intimately associated with strong effects" (p. 231), and Verruecktheit, "a mental disorder in which delusions, usually associated with hallucinations, are carefully combined, sometimes rapidly, but as a rule slowly, into a progressive delusional system; the combination with affects is accidental aud gradually disappears." (p. 236). Confusion is a "secondary form of paranoia. Its relation to paranoia is indicated by the combination, although not firmly, of former delusions." (p. 254). This conception of paranoia admits curable cases, diagnosed Wahnsinn, which run more or less acute courses, and are not grafted upon hereditary mental instability. As Verruecktheit is described the chronic, incurable form, often considered belated imbecility. The term "affects," applied to "feelings which produce

changes in the course of concepts, and are in turn strengthened by the latter," (p. 84), has no exact equivalent in English, facilitates the author's descriptions, and is a useful addition to the nomenclature of psychology.

The last chapter, under the title of "Mental Disorders Associated with Permanent Anatomical Changes in the Brain, or with General Diseases," discusses the various forms of dementia, including paralytic dementia; the insanities of the neuroses; toxic insanities and feeble-mindedness.

In all respects the mechanical execution of the book is good. The text is liberally illustrated, and the clinical descriptions are enlivened by portraits, reproduced by photogravure process, of typical cases. The name of the translator is not announced. The translation is not free from solecisms, by which the author's meaning is occasionally obscured. As an instance, may be taken the careless misuse of the term "Mental Disturbance" as synonymous with "Mental Disease." The title of the first chapter thus creates an unfavorable prejudice, happily not confirmed by the ensuing interesting and instructive text.

J. M. M.

A Clinico-Pathological Study of Injuries of the Head, with Special Reference to Lesions of the Brain Substance. By CHARLES PHELPS, M. D., Surgeon to Bellevue and St. Vincent's Hospitals. Read before the New York State Medical Association, November 16, 1892. Reprinted from the *New York Medical Journal.*

In this paper are reported and analyzed one hundred and twenty-four cases of cerebral traumatism, which have occurred in the author's service during the last two years in Bellevue and St. Vincent's Hospitals. They include all cases of injuries to the head which he has seen in the specified time, and are probably representative of the whole class. Wounds of the scalp have been omitted from consideration.

The summary of the cases is as follows:

I. Fractures of the Base, ... 70
Recovered, 21; died, 49.

II. Fractures of the Vertex, ... 31
Recovered, 21; died, 10.

III. Encephalic Injuries without Fracture, ... 23
Recovered, 7; died, 16.

Total recoveries, 49; total deaths, 75.

In the analysis of these cases, which is creditably and accurately made, the author treats in detail of the complications,—hæmorrhage, thrombosis, lacerations, contusion, concussion and compression,—and of the symptomatology, diagnosis, prognosis and treatment. He points out that elevation of temperature was an "early, continuous, and very constant symptom," in all of his cases, and emphasizes the value of this symptom in the diagnosis between head injury and alcoholic coma. Frequent mistakes in this differentiation justify the warning, and Dr. Phelps would not ascribe coma to alcohol, "except by the strictest process of exclusion." In alcoholic coma, he has found the temperature subnormal, and believes this rule to be absolute. The recovery of forty-nine cases, nearly forty *per cent.*, is a more favorable showing than is usually anticipated. In respect of treatment, the author believes that trephining should be done in "every depressed fracture where elevation and thorough exploration cannot be otherwise accomplished."

J. M. M.

Proceedings of the National Conference of Charities and Correction at the Nineteenth Annual Session held in Denver, Col., June 23–29, 1892. Boston: 1892. pp. 492.

The National Conference of Charities and Correction has now assumed the position of one of our permanent national organizations whose object is the promotion of those great reforms which improve the social, charitable, sanitary, and allied conditions of society and the State. It has grown from a small conference of a few active workers in public charities to an organization whose membership reaches every section of the country. Its proceedings have increased from a thin pamphlet to a portly volume which compares favorably with similar publications either in composition or materials. The great value of such an annual conference of those actively engaged in public charities is very apparent in these proceedings. Widely different methods are freely discussed, new views elicited, and reforms suggested. The proceedings show the large scope of the subjects considered. We find the "Indian policy" in all its phases discussed in able papers, also, "Immigration," the Care of the Insane, the Management of the Feeble-minded; Reform Schools; the Child Problem; Charity Organization; Reformatories, &c. The practical outcome of such conferences will appear at no distant day in a thousand forms of improvement in the organization and management of the charities of the country.

The subject which now especially interests us is that relating to the insane, and to this we shall limit our notice of the volume.

The first paper in this section is on "The Commitment of the Insane," by Dr. Stephen Smith, of New York, This paper recently appeared in the pages of the JOURNAL OF INSANITY and is familiar to its readers. It will be remembered that the object of the paper was to simplify the method of commitment by rendering the medical certificates of the Examiners in Lunacy sufficient. The Examiners were to be qualified medical men, viz., men of reputable character, and graduates of legally chartered medical colleges; these facts being certified by a Judge of a court of record. The author holds that on such a basis the laws of the States might be made uniform, while the process in many States, now very prejudicial to the insane, would be greatly improved. It is gratifying to be able to state that since the presentation of this report to the Conference several State legislatures have taken steps in the direction of modifying their laws relating to the commitment of the insane in accordance with the propositions herein advocated.

The second paper is entitled "Some outlines of State Policy in the Care of the Insane," by Dr. Richard Dewey of Kankakee, Illinois. The author's contention is, first, that there should be separate institutions for certain classes of the insane, and that there should be separate departments in every institution for certain groups. He next notes the changes that have taken place in the construction of buildings for the insane from the congregate to the cottage form, and advocates determining at the outset the ultimate capacity of the new institution. He believes that we shall be obliged to reconcile ourselves to large institutions, as that is the tendency in the vast majority of the States of the Union. All things considered, he would

recommend institutions having 600 to 1,000 inmates. He would have all institutions for the insane under State control and every State should have its unsalaried Board of Public Charities, possessing advisory powers and duties, and the right and duty of inspection and investigation, and of reporting its conclusions in relation to finances, humanity, efficiency and other subjects. He would not give the county the control of the insane, and does not regard with favor the Wisconsin system of State care in county asylums. In regard to internal administration of asylums the writer favors training schools for attendants, a woman physician on the staff, a board of consulting specialists, and more comprehensive scientific work by the medical staff.

The third paper is also by Dr. Dewey, and is on "Insanity following the Keeley treatment for Inebriety." The writer presents notes of three cases of insanity in which he traces the exciting cause to the treatment at the Keeley institute. He has received eight patients who were committed more or less directly after residence at that institute. Of the three cases reported, two had long been addicted to the use of morphine and alcohol in excess, and one only to alcohol. The two former suffered from mania with hallucinations of the auditory type, while the latter suffered only from melancholia. Dr. Dewey states that "In all of these cases there was, of course, a profoundly disturbed condition of the brain and nervous system without reference to the Keeley treatment." This admission greatly impairs the force of the conclusion that the Keeley treatment was responsible for the insanity which subsequently developed. In regard to the treatment itself Dr. Dewey believes that atropine or a drug of its class, is one of the chief ingredients. But much importance is attached to the moral influences employed at Dwight by which the patient is made extremely hopeful. While whisky is freely offered him he takes powerful drugs which partially paralyze him mentally and physically and thus he is impressed with the idea that some great and remarkable change is taking place in his system. At the close of his paper Dr. Dewey admits, not only that he has advised patients to take the Keeley treatment, but that "many of those who have gone insane after the Keeley treatment would have as readily gone insane without it." S. S.

Text-Book of Nervous Diseases.—Being a Compendium for the Use of Students and Practitioners of Medicine. By CHARLES L. DANA, A. M., M. D., Professor of Nervous and Mental Diseases in the New York Post-Graduate Medical School, and in Dartmouth Medical College; Visiting Physician to Bellevue Hospital; Neurologist to the Montefiore Home; ex-President of the American Neurological Association, etc. With two hundred and ten illustrations. New York: William Wood & Company, 1892. [Post 8vo., pp. xii, 524].

The scope and purpose of this work cannot be better set forth than in the author's own words, in the opening paragraph of his preface:

"It is the object of the author in this treatise to present the science of neurology in a concise yet as far as possible complete form. Each subject has been taken, all the available facts regarding it ascertained, the writer's own experience collated, and with the data thus gathered the chapters have

been written. The labor involved in such a task has been very great, but I am encouraged to believe that the result will be a useful one; for the work does not compare or compete with the large treatises which are already in the field nor with the smaller introductory text-books, but I have tried to furnish a book which will be suitable to the student and practitioner and not valueless to the specialist."

The objects proposed have, it seems to us, been very satisfactorily attained. The book furnishes an immense amount of information in a moderate compass. We are not acquainted with any work on the subject that seems to us so convenient for purposes of reference. It is both complete and accurate. Sometimes only one side of a disputed point is stated, as when the author gives his opinion that the seat of cutaneous sensibility is in the cortex of the so-called motor area, without alluding to the view of Ferrier and others that it is in the "limbic lobe," but in such cases he has good authority for the view which he adopts. The style is concise and clear, but a little dry—the book cannot be said to be an entertaining one. The facts are stated, according to the author's view, with but little explicit reference to his extensive experience. This is doubtless due, in great part, to the limits prescribed for the work.

The numerous illustrations are a prominent feature. With but few exceptions, whether original or selected, they are well adapted to their purpose. The execution, however, is not always of a very high order, and in some of them the lettering is so indistinct as to be almost illegible. Some few of them, as, for instance, the case for testing the senses of taste and smell, with the manufacturer's name conspicuously displayed, which takes up the greater part of p. 145, might, we think, have been omitted without detriment.

Much prominence is given to the subject of anatomy, and we think the student who supplements his knowledge of the text-books with what is found here may be satisfied that, for the present, he is up with the times. We notice one slip, on p. 95, where the fourth nerve is said to leave the brain at the edge of the pons.

In pathology, the author shows his acquaintance with the latest results of research. Chorea he suspects to be due to an infecting micro-organism, and the same is true of syphilis. He has found evidence of the latter disease in about 40 per cent. of his cases of tabes. He does not believe it to be a direct factor in the causation of this disease, but to prepare the system for the degenerative process.

The author states [p. 358] that cerebral hæmorrhages are found by far the oftenest in the caudate and lenticular nuclei and adjacent parts. On p. 354 he says that among 53 cases collected by him at Bellevue Hospital, 7 were located in the corpus striatum and vicinity, 2 in the optic thalamus, and 23 were ventricular. Very probably the seat of rupture in a majority of cases of the latter class was in or about the basal ganglia, but, as the statements stand, they hardly seem consistent, and the proportion of ventricular hæmorrhages is surprisingly large.

The subject of diagnosis, both general and special, is, on the whole, very satisfactorily treated. The application of the anatomical facts to the locali-

zation of lesions of the spinal cord is especially good. On the other hand, the matter of cerebral localization does not seem to us to be treated with quite as much fulness as is justified by its interest and importance. In the differential diagnosis of multiple neuritis he omits to mention one fact which we have found valuable—the pretty uniform proportion of the paralysis, both of motion and sensation, in the extremities, to the distance from the trunk, which often, if not always, seems entirely unaffected.

The matter of treatment suffers, perhaps, as much as anything from condensation. Success in treatment is largely a matter of detail, and, although that must be left, in great measure, to the discretion of the physician and the exigencies of each case, it can be taught, to some extent, by example. The directions for treatment are rather often a simple enumeration of the remedies which the author has found useful, or which, in his not very encouraging phrase, "may be tried." Otherwise, they are sensible and judicious. The author is not a therapeutic nihilist, nor is he a rider of hobbies. In the treatment of cerebral syphilis, he advocates pushing the drug to the limit of toleration—in exceptional cases to a daily dose of 600 grains—and believes that results can be obtained with such doses that cannot be obtained with smaller ones. In the use of the bromides in epilepsy he is also an advocate of large doses—half an ounce to an ounce daily, if tolerated, in case smaller doses do not suppress the convulsions. He does not seem to be so great an enthusiast as some on the subject of electricity, and has little faith in hypnotism as a therapeutic agent.

The matter of classification is one in regard to which, in the present state of our knowledge, no system can be adopted which is not liable to objections. The author's classification is primarily anatomical. Diseases of the peripheral nerves, of the spinal cord, of the brain, and functional nervous diseases, are separately treated. Of course he does not fail to recognize the fact that there is not, in all cases, any such strict limitation of the morbid process to a particular section of the nervous system. Neuralgia, the paræsthesic neurosis, and the acro-neuroses are treated of among diseases of the peripheral nerves; spinal irritation and spinal exhaustion among those of the spinal cord, although held to be functional disorders—an arrangement to which, as a matter of convenience, there is no objection. Insanity is omitted, and general paresis is excluded on the ground that its symptoms are those of insanity, a statement which is only true of a portion of the symptoms, and which holds good of some of the symptoms of various diseases included in the book.

The author is entitled to the credit, more rare than might be wished in American medical works, of using the English language and the technical terms of his profession correctly. The book shows for the work of an educated man. We have, however, noticed a few mistakes, for part of which, probably, the printer is responsible, which should be corrected in future editions. "Tendonous," on p. 38 and elsewhere, should be "tendinous;" "ciliarius," on p. 96, "ciliaris;" "talipes vulgus," p. 222, "valgus." "Monro," not "Monroe," was the discover of the foramen mentioned on p. 291. In "Luy's body," p. 298, the mark of the possessive case should follow, not precede the letter s. "Amygdalum," on p. 298, should be "amygdala."

"Urethran," p. 492, does not seem to have anything to do with the urethra. Probably urethane is meant. We think the author's definition of apraxia, on p. 331, as a condition in which the patient is unable to comprehend gestures, is incorrect. If we are not mistaken, the term is properly applied to a condition in which the patient does not comprehend the uses of familiar objects.

We have no hesitation in commending the work both to the student and the specialist.

Twenty-Sixth Annual Report of the New York State Board of Charities. Transmitted to the Legislature January 26, 1893.

This is one of the most interesting and valuable of the many Reports that have thus far emanated from this well constituted Board, whose fortunately long experience and exemplary fidelity to duty have made them perfectly familiar with all the details of the immense charitable system of this State. That system has become so vast, that local patriotism contemplates it with pride,—a pride which perhaps is sometimes liable to the temptation of yielding to local ambition "to secure grand and magnificent structures at public expense," the checking of which tendency, as this report remarks, is one of the objects and powers of the Board itself, by examining into all applications for State aid in establishing or maintaining such institutions. As time goes on this duty, of course, becomes more stringent and perhaps, more disagreeable. We quite agree with the report that this statutory power should be more generally invoked both in the interests of economy to the State and the welfare of the State's beneficiaries.

The amount of property devoted to the charitable, correctional and reformatory system of the State must be enormous, when we find that the total expenditure in maintaining it amounted in 1892 to $18,228,712.57 as against $9,320,142.60 in 1882, nearly doubling in ten years.

The various departments of all this work that come under the supervision of this Board are: 1. The Institutions for the Insane. 2. For Idiotic and Feeble-minded. 3. For Deaf and Dumb. 4. For the Blind. 5. Reformatories. 6. City Almshouses. 7. County Poorhouses. Besides the Board has certain powers of examining questions of incorporation for local charities, such as the care of dependent children, and of State and alien paupers, etc. The details of work are parcelled out among sub-committees of two or three members each, to receive their special attention.

Among specialized institutions, we are glad to see the Board have not deemed it necessary to enter into any lengthened argument in favor of the "Colony for Epileptics" authorized by the Laws of 1892, Chap. 503, a subject which has been fully treated in this JOURNAL. We may be permitted to say, however, that we cannot sufficiently admire the consummate judgment, business sagacity and good taste they have displayed in their final selection of a site for such an institution out of a variety that of course were eagerly offered. From the description of the buildings and the 1,800 acre farm in Livingston County, on which they are situated, we should judge that the results cannot be otherwise than most gratifying for this most afflictive form of disease whether in the sane or insane.

Among other special charities, the very effective supervision given by the Board may be seen from what is said of the institution at Newark and the proposed manner of sifting the inmates with a view to carrying out the real intent of the establishment. The same observation applies to that portion of the Report on the Reformatory at Elmira, an institution both designed and able to accomplish a grand purpose, if it is not allowed to become overcrowed, and its inmates turned into a mere militia-muster, and deprived of the influences of personal treatment. Originally meant for but 504 prisoners, the number has increased to nearly 1,500. We hope the Legislature will act on the suggestion of the Commissioners not to enlarge the present structures further, but to build another in the eastern part of the State. It is an instance of practical wisdom in the Board that they recognize here, as in other places of their report (see page 48), the indubitable fact, that "the reformation of individuals (of either sex) is more probable in *small* institutions."

The Report goes thoroughly into the matter of State, foreign and alien pauperism, whither for our present purpose we need not follow it. It is a striking fact, however, that out "of the entire number in the county poorhouses in the course of the year (1892) 32,678 were native and 50,989 were foreign born."

The number of insane in the State is given as 17,457, of which the eight State Hospitals contain 7,484; the asylums of New York and Kings Counties, 7,887; the asylum for insane criminals at Matteawan, 348; incorporated and private asylums, 881; city asylums and poorhouses, 857. The increase for the year has been 810. Since 1880, the ratio of insane to population has grown from one in every 533 persons, to one in every 373, an increase of 83 per cent., while population has increased 28 per cent. It is hardly necessary to comment on the report of each several institution, as these are given more fully in the Report of the Lunacy Commissioners. We observe however, that all but three of the State Hospitals classify their discharges only under the heads of "recovered" and "not recovered," while all have a separate mortuary column, thus ignoring the old distinctions of "improved" and "unimproved." We cannot help thinking this is an inadequate credit for much good work. Undoubtedly it frequently happens that those discharged "improved" are sooner or later returned to the institution, but may not this be the case with some supposed to be "recovered?" "Not recovered" often includes many who have been brought back from an exacerbated state to very near the border line of complete sanity, so that they do very well in a quiet home, and under the eyes of careful friends. It is unjust to reckon them in the category of "unimproved," as is apt to be inferred from the mere label of "not recovered."

In their "general remarks regarding the insane" the Commissioners very properly animadvert upon the abominable practice found in some county poorhouses of mingling the sane and insane inmates in the same departments or wards.

We also here heartily thank them for the following observations embodying only common sense principles which we have often insisted upon:

"It is thought that in the enlargement of existing institutions, productive

farming lands should be purchased, and the more quiet and chronic class be separately colonized in cottage buildings thereon, under the immediate charge of a resident physician, who should be responsible to the medical superintendent and under his direction, but competent to relieve him from the administration of details in the care of this class, in order that his principal and special attention may be given to the acute and more curable cases. The State Care Act, while abolishing the old legal definition or criterion of chronicity, does not, and should not be construed to abolish the distinction between acute and chronic stages of the disease of insanity on medical grounds. The recognition of this distinction is important in the proper administration of the existing laws, in order to prevent the intervention of obstacles and hindrances to special treatment of acute and curable cases." W. T. G.

Diseases of the Lungs, Heart, and Kidneys. By N. S. DAVIS, JR., A. M., M. D., Professor of Principles and Practice of Medicine, Chicago Medical College. No. 14 in the Physicians' and Students' Ready Reference Series. 12mo., 359 pages, Extra Cloth, $1.25 net. Philadelphia: The F. A. Davis Co., 1231 Filbert Street.

In this work, Dr. Davis has arranged and elaborated the lectures he has given on diseases of the heart, lungs and kidneys at the Chicago Medical College for several years past; and this fact, alone, would speak its merit. He has avoided the tiresome grouping of its pages into "Lectures," which is often affected by college professors in their smaller works, and has made each chapter descriptive of a disease.

It cannot be said that there is anything new in the book, and, indeed, it was not the author's intention that such information was to be expected; but, as a handy and authoritative book for the student, and a convenient reference for the practitioner, it fulfils its mission.

Controversial topics have been avoided, save in a few instances in which the author's opinion has been stated as a fact. Here, the reader is left to decide for himself as to the value of the opinion. The sections on treatment are extensive but not cumbersome. The indications for the uses of the various drugs are concisely stated, and no doubt is left as to the reason for any of the medication recommended. R. R. D.

NOTES AND COMMENT.

THE PLEA OF INSANITY IN CRIMINAL TRIALS.—In the January number of this JOURNAL we had the pleasure of printing three papers on the "Plea of Insanity in Criminal Trials" which had been read at the Inter-Colonial Medical Congress held at Sydney, N. S. W., in September, 1892. Their authors are men of wide experience in the practice of Psychological Medicine. They write well and to the point, handle the subject with a precise historical analysis of its varying phases in the Jurisprudence of Great Britain and her colonies, and in their conclusions and suggestions represent the latest advances of medical science in its alliance to the administration of justice. One of them in particular, Dr. Manning, has a world-wide reputation as a medical jurist whose official relations to the insane for the past twenty years have given him exceptional opportunities to thread the devious mazes of this subject in the labyrinths of legal principles and juridical procedure. Great weight should therefore be attached to his opinions for they have been moulded in the forum of law as well as in the temple of medicine, in adjudicating cases of alleged and undetected lunacy in convicted criminals, as well as in supervising the clinical and administrative treatment of the insane in lunatic asylums.

The object of these papers, as we interpret them, is to show that courts do not keep pace with the progress of psychological discovery in the field of insanity; that insane persons are still wrongfully convicted of crimes which their disease drove them to commit, and that in consequence they are punished, not for doing wrong, but for being sick and losing self-control; that disease, though latent and invisible to a judge or jury, still constitutes duress and creates irresistible impulse in its subject to act wrongly and injuriously, while still leaving him able to know fully, and to intend the natural consequences of such acts; finally, that the opinion of medical experts having an indisputable monopoly of knowledge of the interior workings of the human mind in all its varied relations to thought, feelings, appetites and motives should enjoy the prerogative of judicially deciding upon the guilt or irresponsibility of criminals when on trial and interposing the plea of insanity in answer to an indictment. In other words, that the

opinions of medical experts are not given that controlling weight which should attach to their evidential character.

Perhaps the best answer to this allegation of systematic enslavement to obsolete ideas of insanity on the part of courts, is given by Dr. Manning himself, who, after rehearsing the experiences of his long apprenticeship among, and his official services to, the insane, says: "I think I have shown that, though *justice has been in the main done*, the processes leading thereto are clumsy and unscientific, and that the result has been arrived at rather in spite of the law and by means outside its processes, than by its means." This statement surrenders the whole case as one of contentious litigation between the two sciences of law and medicine by admitting that justice, which is the sole purpose of law, is eventually done however "clumsy and unscientific" may be its processes in the eyes of medicine.

But none of these papers seem to take into account the fact that the law is an administrative system founded upon the necessities of society as constituted at large; that the first duty of any society is to protect its own rights as a whole, before protecting the individual rights of its members. Thus a man has a right to the enjoyment of his personal liberty, yet if indicted, he may be detained in jail for months before a first or second trial, and, though acquitted, has no remedy against the community for loss of time or damage to his estate. Hundreds of such cases occur every year to men tried on mere suspicion. Hence the "salus populi" and not the "salus hominis," is seen to be the true "suprema lex." This subordination of individual rights to public rights is inevitable in the very constitution of human society. It cannot be altered by legislation or progress in psychology, for it is rooted in the nature of the juristic rights which flow out of communal existence; —consequently, in its methods of judicial procedure the law must first provide for mental conditions to be found in the majority who are sane and responsible, and not for the small minority who may be insane, imbecile or idiotic; after doing which it can and does secure protection to the insane and irresponsible by creating commissions in lunacy, hospitals for the insane and supervisory inspectors. But these two duties cannot be discharged simultaneously in the same forum. Guilt is a civil question belonging to the forum of law, and when made an issue between the State and an individual must, under the constitution of courts and as a

primary question, be decided by a jury alone. On the other hand, insanity is a medical problem belonging to the domain of psychiatry and should be decided elsewhere and by experts alone.

Now, since medicine in the eyes of the law cannot furnish any certain test to prove in many instances that an individual was irresponsible, because insane to a degree which a jury could recognize, and since courts cannot undertake to do that which medicine has failed to accomplish, the Gordian Knot has had to be cut by the adoption of some general dogma of "right and wrong" which adapts itself to the conditions of the majority of mankind. No one claims that this doctrine affords a perfect test, for perfection of knowledge is out of the question in problems requiring opinions on the laws of vitality as they affect the functions of organs subserving simultaneously both purposes of animal and mental life. There are always some unconditioned factors here whose exact parts in causation of mental results cannot be traced or explained. None know this better than experts themselves. Yet they accept them as proximate causes for want of any better ones. Hence the law, not claiming to be wiser than medicine, has established no legal test of insanity. And since it must in some way define responsibility in order to affix penalties, it rests it where alone it can upon the knowledge of right and wrong as modified by duress in relation to the particular act committed. The law of criminal responsibility must always remain and be administered as a problem of in-exact elements expounding human conduct upon the basis of general averages. Under such variable postulates it must weigh and apportion the preponderating ratios of right over wrong, of health over disease, of free-will and intention over duress and irresistible impulse. It is upon this universally received doctrine that justice is sought to be administered because there is no safer one upon which it can proceed. Moreover, a court is a place where justice must be *judicially* administered and not otherwise, for, according to its constitution and the authority bestowed upon it, it is not a reörganizer of men's physical or mental conditions within the sphere of their personal and moral liberty. It cannot save them from the penalties of violated law when there is no legal evidence of their mental shipwreck; for it cannot administer justice therapeutically and according to the dogmas of this or that school of pathology; nor sentimentally, according to the ideas of philanthropists, nor in any

other way than that which time and experience through manifold precedents have shown to be most conducive to the safety and well-being of society at large.

Under this aspect of the problem of insanity the testimony of experts is not more discredited than is that of other witnesses who are flatly contradicted. And they are often contradicted by their own professional peers not because they are explicitly wrong in their judgments, but because they attach to mental phenomena such varying degrees of value, as instigators or accessories of motive or conduct, as to bring them in direct conflict with the opinions of other investigators of these same phenomena. If, as often happens, these irreconcilable differences of opinion arise between experts, who shall decide the mooted question? Looking at the intricate nature of these problems in mental pathology, how can a court or jury be presumed to know, or rightly appreciate, the part played by the highly integrated nerve centres, whether psychomotor, or ideational, in the production of hallucinations, false motives to action, or impulses to commit crime? How can laymen without preparation enter into an analysis of the personal equation of an individual in all the organic vicissitudes of cerebral hyperæmia, anæmia, atrophy or whatever forms of mal-nutrition may be present and attempt that most difficult feat in psychiatry, of affixing a proper co-efficient of moral value to the conduct and responsibility of each individual wrong-doer? Statutes even cannot attempt it by enumerating phases or classifications of mental disease and are framed, therefore, upon the assumed general condition of mankind. It is plainly seen that no other alternative is left courts than to execute written laws by keeping within their expressed limits. These limits are jurisdictional boundaries which cannot be extended by them at will. Hence in criminal trials inquiry must be primarily confined to the question of guilt alone, meaning thereby the connection of an act with an actor, and not to that of disease. But if disease is made to appear so glaringly that the conduct of an individual is incompatible with the idea of crime or free-will, then, the very basis of responsibility being absent, the case against him evaporates from its own un-substantiality.

But even should an insane person be convicted of crime, opportunities are never wanting, either in England or the United States, to have his mental condition passed upon by psychological experts.

Dr. Manning testifies to his experience in such cases. In 24 years only nine persons were erroneously convicted in that extensive Colony, and upon his inspection and recommendation, they were dealt with as insane persons. And the same rule obtains in probably all European countries. The risk, therefore, of executing the death penalty upon an insane person grows smaller and smaller daily. The very judges themselves, when in doubt as to its propriety, often join in a suggestion for the appointment of a commission to inquire into the mental sanity of the prisoner. These methods may appear "clumsy and unscientific" to physicians, but they are found experimentally to be safest for the protection of society. Justice being blindfolded must of necessity walk slowly, feeling the ground at every step. It cannot be administered according to an algebraic formula, nor measured by a clinical thermometer or the results of chemical or microscopic investigations. Life, under all circumstances, is an organic equation full of independent variables many of which are of incomputable power.

The McNaughten case about which so much has been said in these papers is no longer the sole guide in issues of insanity in England. It has been so qualified, explained and melted down in the crucible of judicial opinion as to have retained little of its former authority. It is, doubtless, still cited for the purpose of tracing the steps which have been taken by courts in eliminating from its conclusions conditions of mind not then as well recognized to be indicia of insanity as now, but its glory has departed in the broader views recently taken by courts of the various phases of mental obscuration. Necessarily also, in England, the weight of such a table of the municipal law as this decision of her senate of judges established cannot be suddenly dissipated, but the history of her subsequent legislation shows anything but a blind adherence to judge-made laws, when seen to conflict with the greater laws of Nature which govern human actions. While Parliament has very wisely left the proper jurisdiction of courts in criminal trials unintruded upon by issues foreign to the indictment, it has in the Trial of Lunatics Act (46–47 Vict. c. 38) performed a most important duty, both to the integrity of legal procedure and to the insane, by requiring that "if it appears to the jury before whom such person is tried that he did the act or made the omission charged, but was insane as aforesaid was insane at the time when he did or made the same,

the jury shall return a special verdict to the effect that the accused was guilty of the act or omission charged against him, but was insane as aforesaid at the time when he did the act or made the omission." This cures the defective phraseology in the Act (39 and 40 Geo. 3 c. 94) permitting the jury to return a verdict of "not guilty on the ground of insanity," which finding constituted a paradox in the law of evidence, for it was tantamount to saying that, although the accused was proven to have committed the acts charged, yet, on the ground of insanity, he could not have committed them. Therefore the claim of the insane to immunity from punishment is adequately secured by allowing a petit jury, after passing upon the fact of guilt (meaning legal guilt), as averred in the indictment, to draw the sting from conviction by coupling with their verdict their opinion of the mental state of the prisoner at the date of the commission of the act charged. This is a step so far in advance of any heretofore taken in that direction that it practically leaves no ground for asking anything more from the domain of her criminal procedure.

AMICUS PLATO, AMICUS SOCRATES, MAGIS AMICA VERITAS.—"Oh, that mine enemy would write a book!" was the cry of sanguinary critics of the olden time. And woe upon that enemy if he failed to heed the warning implied in this appeal,—to heed it and restrain his literary impulse. Failing of so acceptable a victim as an actual enemy, the critic was wont to cast about him for a literary substitute who could be made to suffer in his stead. To use the pen as a rapier; to immolate the victim; to make him do penance over fire,—such was the instinct of the old-school reviewer. Even Macaulay, who lived in an atmosphere far above personalities, found it necessary at times to adopt the conventional methods of his profession; though of course they ceased to be conventional the moment he took them up. Witness, if you will, the occasion on which, in the interests of a long-humbugged public, he flays alive the literary personality of one Robert Montgomery, poet, whom conscienceless "puffing" had foisted upon the world. Of course, it needs not to be said that when Macaulay and the other great men of his kind found it thus necessary to prick a soap-bubble reputation, they did it in the interest of good literature and for the education of the public. But the small fry, equally of course, had no motive in aping the

masters except the hope that they themselves might be mistaken for masters. Hence they cut right and left with an indiscriminate mock-fury which they hoped to palm off as righteous indignation.

Or, again, departing altogether from the method of the masters, these lesser scribes, as the mood seized them, would lay aside the rapier for the wand, and with nectared incantations, strive to force entrance for some poetaster of their time into the hall of the classics. It was such efforts as this that aroused the wrath of Macaulay. He bitterly complained that the people would not read for themselves, and he vowed to aid them by serving any author whose meretricious works should be puffed into a second edition, even as he had served Montgomery,—a vow which may be supposed, on the principle that misery loves company, to have been emollient to the wounds of poor Montgomery, but which must have sown consternation broadcast in the ranks of the aspiring.

But the times are changed,—as the reformers are wont to assure us. It can no longer be complained that the public does not read. It does read, none too well perhaps, but too much rather than not enough. But it also thinks: and—marvel of marvels!—it is even beginning to think for itself. Hence it stands less and less in need of despots, and as time goes on the literary despot must go with the rest. Only a generation ago, it was said that George Henry Lewes, the most pungent and the wisest critic of his time, could set the press of all London wild with the praises of his idols. But before his trenchant pen was laid down forever, it became known that even he needed a George Eliot for a subject, else the response no longer re-echoed as of old.

Who is to-day the literary Mentor who can make or unmake an aspiring author with the dash of a pen? There is none. England's greatest statesman has sometimes been looked up to as such a censor, it is true, but doubtless through no intention of his own. And even his words are futile save for the moment. Two or three years ago, in a burst of well-meant but mistaken enthusiasm, he puffed into ephemeral notoriety a work which properly belonged on the shelf of the psychiatrist rather than in the library of the dilettante. But within a twelve month the work had sunk into deserved oblivion. Merit and demerit have always found their level in the long run, but never so quickly as to-day when everyone reads, criticises, judges for himself.

But let it not be inferred from this that we suppose the era of

the review and the reviewer to be past. On the contrary, there is every reason to believe that it has not yet reached its zenith. It is merely that the character and function of the reviewer have been altered. He has not been eliminated, but, like everything and everybody else, evolved. Keeping step with the march of events, he has ceased to be a dictator, and has been relegated to the humbler but more useful field of interpreter. Here his opportunities are widening day by day; for it has chanced that the public which was invoked to read has done more than it asked,—it not only reads, but it also writes. Of making many books there was no end aforetime; but the "many" of the day when this was written is to the many of to-day as a single blade of grass to broad meadows. Volumes pour from the modern press as fast as words flowed from the quills of old. "Read!" well may cry the student of to-day: "Read! What shall I read? Or better, what shall I not read?" And forth steps the critic to answer his query.

"I will tell you," he says: "I will stand between you and the multitudinous author. I will be your interpreter."

"Well and good," replies the reader. "But mark you, I require an interpreter only. I know very well what I want and what I do not want, only I cannot afford the time to wade through a quarto to find that it does not contain what I need. Go you to the author. Read him, or at least skim him carefully. Tell me then the gist of what message he has to convey. If it is too long a message to be epitomized, tell me whether it is new or only the old thing done over. Give me enough insight into it that I may judge whether it is for me a valuable and useful message, one that will aid me in my particular line of work. Tell me something of the book itself, not merely your ideas on the subject it treats of. Interpret it for me, and look to it that you interpret it correctly."

Is it not plain that the reviewer who can bring satisfactory answers to these questions has a useful mission, though it be only a mission of interpretation? He requires in some sense a better equipment than the reviewer of the old school. For how can he say what is new and what old, what good and what bad, unless he is himself familiar with the subject of which his author treats? And if he does not so discriminate, if he indulges merely in generalities, which might as well be written without seeing the book at all, he may produce a fine literary performance, but it is a per-

formance of the kind that is obsolete: it fails of its purpose as a review of the modern type. To produce a review of this modern and useful type, he must, in short, be a connoisseur in the field of his work. He must be a delver in the same lines as the author he reviews and the public for whom the review is written. How can he interpret a language he does not know?

All of this is merely another way of saying that the modern review has come to partake of the scientific spirit which is now all-pervasive. More especially is this true as regards the kind of reviewing that comes within the scope of the JOURNAL. In purely literary fields, reminiscences of the old methods may yet pertain. But the cry of the scientist is "Facts! Give us facts! Let your reviews be, as far as practicable, abstracts of facts, skilfully digested; or at most interpretations of the facts as filtered through competent minds."

Such at least are the conditions as we understand them. And we have cited them here for the purpose of leading up to a statement of the JOURNAL'S policy and position in regard to what we consider one of its most important fields of usefulness. Each quarter there are issued from the presses of the world a flood of pamphlets, brochures, reports and books of which every well informed alienist must have cognizance. But no one person could by any possibility read them all. Hence we assume that our readers look to the JOURNAL, in part at least, to epitomize these records, to point out the parts that may be put aside and those that had best be studied in detail: to keep them in touch, in short, with the progress of the world in the line of their particular work, and in closely allied lines. In taking this stand, the JOURNAL has itself merely kept step with the march of events. The most useful department of most scientific periodicals of the day is the department in which the records of progress from month to month in their particular field are epitomized. By reading these, a man may keep in touch with the times. Failing to read them, no matter what his diligence, he will soon be living in an atmosphere of archaism.

An important inference is obvious, as bearing upon the task of reviewer. If the scientific review is to fulfil its mission, it must be written in the scientific spirit. It must be an epitome of facts without a suspicion of prejudice; it must summarize fearlessly according to the best light of the reviewer. It must treat friend

and foe alike: rather it must forget the meaning of the words friend and foe, and remember only impartiality.

On the occasion of that famous Belfast address which is a part of the history of modern science, as Professor Tyndall introduced Professor Huxley, he said, in substance: "I do not know what the speaker will say to you, but this I know, that whatever he says will be what he believes, for he is a man who, before all else, loves the Truth." "Before all else, the Truth!" These words are the motto of modern science. They are the motto of every honest reviewer; and the JOURNAL hopes in the future, as in the past, to trust its reviews in such hands as will insure that within its covers this motto shall ever be kept inviolate. What its reviews say is what its reviewers honestly believe about the work in hand. But the reader must remember that fulsome praise is as unscientific as prejudiced rebuke. Where exists prejudice of any kind science can never come. If sometimes our reviewers must censure where they fain would praise, we ask our readers to believe that it is done in no such spirit as that of the partisan who yearned that his enemy might write a book, but in the spirit of the modern cry: "Before all else, the Truth."

THE PREVALENT EPIDEMIC OF QUACKERY.— In a very lively lecture, delivered by invitation of the Faculty of the Medical Department of Buffalo University to its graduating class in Medicine, Dr. Gould, editor of the *Medical News*, Philadelphia, discusses the Etiology, Diagnosis, and treatment of the prevalent Epidemic of Quackery. He sails into denominationalists, Keeleyists, faith cures, *et id genus omne*, in dashing style. Humbugs in the regular profession, the gullible public, the venal press, come in for their share. His strictures are well-merited and well put; the standard of professional conduct that he sets is high, but not, in most respects, unreasonable; the remedies he proposes—abstinence from quackery, non-intercourse with quacks, combination against the common enemy—are perhaps as good as can be devised, but we fear that in spite of them quackery will continue to flourish long after we are dead and gone, and, perhaps, under the law of the survival of the fittest, will contribute to the perfection of the race. "A quack," says Dr. Gould, "is a man more interested in himself than in the healing art; caring more for his patent than for his patient; more desirous of making dollars than of curing disease. A

physician is one whose first thought is to cure his patient. This is the sharp dividing line that makes the whole matter clear."

The late Dr. J. Marion Sims, after he had been, for a number of years, in active and successful practice, planned to go into the ready-made clothing business, and was only prevented from doing so by the failure of the firm with whom the arrangement was made. It seems a fair inference, therefore, that at that time, he was more interested in himself than in the healing art, and more desirous of making dollars than of curing disease. We suspect that, if every member of the medical profession were offered the chance of making double the money that he is at present earning, with half the work, at some other occupation, those who persevered in practice would have plenty to do. We would not object to characterizing as a quack any man who, in a case which he had undertaken, subordinated the health of his patient to his pecuniary gain, but we should hesitate to apply the term to a man who practices medicine to make a living, so long as he does it honestly.

Dr. Gould is very severe on those who, like Dr. H. C. Wood, propose to recognize professionally such homœopaths as are rational in their practice, on the ground that the distinction between them and the regular profession is a fictitious one. He considers it dishonest in the professed homœopathists to allow their patients to infer that there is something radically distinctive in their practice, while repudiating, tacitly or explicitly, the teachings of Hahnemann, and we confess that it does not seem to us easy to reconcile such a course with strict candor. But how many of those who are most shocked at such quackery are entirely candid with their patients? A homœopathist has a patient who does not need dosing, but will not be satisfied without something to take. He prescribes, we will say, the thirtieth dilution of lycopodium, to be taken every hour. A regular practitioner, in such a case, would not be guilty of any such deception. He would, perhaps, give two grains of bicarbonate of soda, in solution, three times a day. Is not the difference a little like that between tweedledum and tweedledee? Of course the real distinction is that the regular practitioner does it from lofty, and the homœopathist from base motives. A man may, if he chooses, determine that he will never knowingly allow his patients to be under false impressions as to what he is doing for them and his reasons for doing it. But if he refuses to recognize professionally any one who is not equally strict, he will be likely, in

most communities, to have a limited choice of consultants. We incline to think that, so long as a physician does not deceive his patients to their injury, the extent to which he shall use deception in dealing with them is best left to his own conscience. As a matter of fact, we all consult, without scruple, with men in the ranks of the regular profession whom we believe to be, to a greater or less extent, charlatans. If we choose to draw the line there, well and good, so far as we are concerned, but let us not throw stones at our neighbor who is willing to consult with a charlatan outside of the regular profession, in case he is satisfied of his competency.

Let us not be understood as disposed to lower the standard of personal rectitude in such matters. We hold that humanity and professional honor alike require the physician to subordinate his own comfort and his pecuniary interests to the health of his patient. Not only so, but we also believe that humanity may require that we sacrifice the conventionalities and class interests of the profession to the relief of suffering. The dupes of quackery do not, by virtue of that fact, lose all claim to our sympathy and aid, and it may be, in a given case, a delicate question whether it is the greater wrong to seem to countenance imposture or to withhold the help that we might give in averting suffering and death.

Are Asylum Physicians Party Pensioners?—The notion that public officers are the pensioners of a party, not the servants of the whole people, seems to die hard. The prospect appears to be that the officers of all the hospitals for the insane of the State of Illinois will be turned out to make room for members of the political party which, after an outing of thirty-five years, has once more gained the upper hand. It is true that the present Governor, in his canvass, made charges of extravagance and mismanagement against those institutions, but we presume that no one will seriously maintain that a lack of confidence in their management is the only, or even the principal reason for so sweeping a change. It is also true that, so far as one wrong can justify another, the course of the republican party, during the long period of its dominance in the State, has afforded an excuse for such a course. Only republicans have been appointed on the boards of trustees, and we understand that the officers of the hospitals have been regularly assessed a portion of their salaries for the campaign funds. It is not long since the superintendent of the hospital at Anna was driven out

of office with little or no pretense of concealment of the fact that the ground of his dismissal was his lukewarmess in partisanship, and, from all that we can learn, his successor has not erred in that direction, although his attainments as an alienist have not, we believe, even yet, earned him any very wide celebrity.

We do not suppose that if a member of Governor Altgeld's family were to become insane, and he were looking for a suitable private hospital, it would ever occur to him to enquire into the physician's views on the tariff. We have no doubt that multitudes of those who will applaud his action in this matter, or take it as a matter of course, employ, by choice, physicians of a different political faith from their own in their families, and would laugh at the idea that a man's political views have anything to do with his professional competency. It is the view that the salaries of these offices are not, primarily, the reasonable compensation for honest and faithful discharge of their duties, but the reward of activity in an entirely different field, that allows people to view with approval or indifference such changes, entirely without regard to the merits either of those who are turned out or those who are put in.

The pernicious effect of such a policy is so plain that we should feel as if we were insulting the intelligence of our readers by arguing the question. Men whose aspirations are for professional eminence and usefulness will hesitate about accepting positions in which such qualities count for nothing. Even if competent men are secured, they are sure, in a State in which parties are pretty evenly balanced, under such a system, to be turned out before they have acquired the experience that will enable them to do their best work. The inevitable tendency, under such conditions, is to the filling of the offices by men whose only object is to make money out of them, and who, knowing that the time is short, will "make hay while the sun shines."

We have no doubt that, in time, the mischief of treating the funds provided for the relief of the unfortunate as plunder will become so plain that it will be no longer possible in a government like ours. But we fear that a good many object lessons will be needed first, and in the meantime the insane must suffer. We shall be as much surprised as gratified if the medical profession of Illinois, without distinction of party, shall denounce the iniquity as it deserves. In the meantime, we believe it is the right and the

duty of the American Medico-Psychological Association to scan critically the qualifications of the men who profit by the misfortunes of its honored members, should they apply for admission.

THE FIRE AT THE ST. LAWRENCE STATE HOSPITAL AND ITS LESSONS.—On the morning of March 4th, about two-thirds of a block of buildings known as group number three, at the St. Lawrence State Hospital, was burned. This substantial mass of buildings, intended to accommodate four hundred women patients, with a separate wing for sixty nurses and a central building for the residence of two physicians, was about completed, and was in process of being furnished. It was unoccupied except by a few employés sleeping in the nurses' building. There was one night-watchman employed by the building superintendent, and it is worthy of note that the building had not been placed in the custody of the medical superintendent. The fire was discovered by a night attendant in the central hospital, situated about fifteen hundred feet from the burned buildings. The fire had evidently been progressing for some time when discovered. The general alarm was sounded at once and the response was reasonably quick, but it was found that the flames had spread about seventy-five feet from basement to attic when the first contingent reached the fire. Fire pressure at the pump was put on when the alarm was given, but the streams placed upon the fire from both inside fire-plugs and outside hydrants were found to be quite ineffectual from lack of pressure. This was subsequently found to be due to a broken water main passing through the building, that had been fractured by the falling floors. The free end of this large pipe was discharging at its full capacity, and the water at the point of emergency beyond the break was consequently wholly shut off. It was by the heroic efforts of the hospital fire department, in breaking the roof line and checking the spread of the fire in the attics, that an important part of this beautiful group of buildings was saved. The administration building, nurses' building, and a large wing containing two of the larger wards remain uninjured. It was notable too that the wings containing closets, lavatories and baths, and the kitchen department, that were floored by brick arches covered with tile, prevented the spread of the fire and resisted the falling roofs, affording protection to the plumbing and heating apparatus in the basement. The fire did its destructive

work and was checked in less than three hours from the time of its discovery. The cause of the fire remains unknown.

Every great catastrophe teaches important lessions, and the recent one at Ogdensburg is not an exception. There were three important precautions that should have been taken, and the lessons to be drawn from this unfortunate experience apply to construction elsewhere.

I. *An outside line of water pipe with hydrant openings should surround buildings before the roofs are put on.* The nearest outside hydrant was distant about one thousand feet from the fire. Although the supply of hose was liberal it was only possible to place two streams upon the fire, and the inside fire-plugs were practically useless on account of the intense heat and smoke. It proves the futility of inside fire protection except for incipient fires.

II. *Fire walls should be built through the attics and roof, of brick, wherever it is feasible, and especially between every section.* In the recent fire it was noticed that it spread with the greatest rapidity along the roofs through the attics, filling them quickly with smoke, and rendering a near approach to the fire in the attics an impossibility. A wall completely dividing the roof would have given an opportunity of checking the fire at a division wall.

III. *Attic fire protection that can be governed from some distant point.* It is reasonable to suppose that any automatic protection by water in attics will fail in the large proportion of instances. Inside extinguishers depending upon an individual to operate are useless. Fires that reach attics are seldom if ever discovered in their incipiency, and any extinguishing element must be directed from without and be capable of disseminating the closed space without intelligent direction; hence, steam which is well known to be an effectual fire extinguisher and which every well-equipped asylum building contains, would seem to be the proper element to use. A steam pipe of appropriate size, from the domestic service—which is in use at all seasons of the year—should have a free end in each attic section, and be governed by a valve in the basement of some other section; thus providing against being cut off by smoke or falling debris. All ventilating flues opening in the attic should also be connected with the ventilating stacks by metal ducts. It is very evident that at Ogdensburg, the fire was carried to the attics by these flues, which were not connected. It may

be truly said that the buildings were not completed, and that after completion these precautions would have been found. The only moral then to be drawn from this experience is, that fire protection should progress equally with construction and should not remain for the finishing touches.

It is with pleasure, and with a feeling of pride in our liberal Legislature and Governor, that we are able to state that at its first session following the fire, a law was passed appropriating $181,500, to restore group number three. We understand work is now progressing with diligence, and that it is expected this noble series of buildings will be ready for patients by October, this year.

THE SUPPORT OF THE INSANE IN NEW YORK UNDER STATE CARE.—Elsewhere * the JOURNAL publishes the text of Chap. 214 of the Laws of 1893, together with a memorandum by Governor Flower, being the Act whereby State Care goes into full effect. In order to provide for "the care, medical treatment, maintenance and transportation of the insane poor to State hospitals, the payment of officers' salaries, the payment of employés' wages and ordinary and incidental repairs in State hospitals," a tax of one-third of a mill is imposed on each dollar of taxable real and personal property for the fiscal year beginning October 1, 1893.

The money thus raised and appropriated can be expended for the several institutions only on submission to and approval by the State Commission in Lunacy of "estimates in minute detail of the expenses required for the hospital." Such estimates shall be furnished by the medical superintendent on or before the fifteenth day of each month, and after approval or revision by the Commission of such estimates, the Comptroller shall authorize the Board of Managers to make drafts upon him. In all such estimates, however, there shall be a sum named, as a contingent fund, not to exceed one thousand dollars, for which no minute detailed statement need be made.

It is also provided that the medical superintendents of the several hospitals or their represenatives shall meet at least once in every month at a day to be appointed by the Commission in Lunacy at its office for purpose of consultation.

The act empowers the Commission to appoint "two agents

* Official Notices.

whose duty it shall be to secure from relatives and friends who may be liable therefor or who may be willing to assume the cost of support of any such inmates of State hospitals as are being supported by the State, reimbursement in whole or in part of the moneys thus expended." The compensation of each of these agents shall not exceed one thousand dollars per year, exclusive of traveling and other incidental expenses.

The act will take effect October 1, 1893.

BURNING OF THE STRAFFORD COUNTY ASYLUM, N. H.—The State Board of Health of New Hampshire has conducted an investigation into the cause of the burning of the Strafford County Asylum as well as into other matters pertaining to the management of that institution and the county almshouse.

The fire was first discovered about 10 o'clock on the night of February 9, 1893. The entire building was destroyed and forty-one persons lost their lives.

"The asylum was a two-story building, with two-story L with attic, first floor occupied by keeper and his family and seventeen inmates, second floor by nineteen inmates, attic by eight inmates. There were fifty-six cells or apartments in all, twenty-one apartments or cells on the first floor, twenty-three on second, and twelve in attic. The asylum was erected some twenty years ago, repaired and enlarged somewhat about ten years ago, constructed wholly of wooden materials, floorings, partitions, sheathings, and furnishings to all the cells of pine lumber, flooring and sheathing so dried and shrunken in portions of building as to enable persons to see each other between floors and cells, heated throughout by steam from boiler, by pipe hung from overhead. Its location was seventy feet west of the almshouse and four miles from Dover and about six miles from Great Falls and Rochester. The out-door enclosure for the use of the inmates was surrounded by a wooden fence about ten or twelve feet high, windows to asylum barred with four or more bars; also some of the windows had heavy wire screening on the inside; building had four doors, one in main building, one in cell, one leading into the out-door inclosure for women, and one leading into a like inclosure for men. Said building was supplied with two hundred feet of rubber hose, one hundred feet of which was kept coupled on to pipe leading to tank in the attic of almshouse; capacity of tank, twenty thousand or more gallons, that is always kept well filled by supply from pumping station. Another one hundred feet of hose hung on reel near stand-pipe; also supplied with four water pails on first and four on second floor, which were always kept full."

The entire care of the forty-four inmates devolved upon the keeper and his wife. The investigation revealed the grossest negligence in the care of the unfortunates who perished.

It appears probable that the fire originated in a female patient's room by the ignition of a match in her possession. The attendant was in the habit of furnishing matches to smokers, of whom the woman in question was one. It also appears that the fire might have been extinguished immediately after its discovery if the watchman had had his wits about him and done his duty. He was totally unfit for his position. In fact, there were carelessness and inefficiency everywhere, from the county commissioners downwards.

The disaster is an object lesson in the abominable evils of county care in its worst form. The system was "not originated through carefully matured plans after due consideration of the requirements of the insane, but it was the outgrowth of a forced necessity, the guiding principle of which has been to house, clothe and feed the unfortunate class at the smallest possible expense to the county. To this end, few provisions have been made for anything beyond the brute necessity of life."

Let us quote further from the vigorous report of the State Board:

"The principle that the insane should always be regarded as sick persons who require expert medical treatment and special care with reference to surrounding influences has not been taken into consideration in caring for our insane poor. Insanity is now recognized by the highest medical authorities as a disease, possessing an infinite variety of symptoms and manifestations, and requiring the most scientific, competent, considerate, and careful treatment and management. This more humane and logical method of treating the insane has been so frequently demonstrated to be the best and most successful, even among the so-called chronic class, that the most skeptical have only to search the records to be convinced. It is through failure of legislative bodies to recognize the fundamental fact that insane persons are sick persons that no better treatment has heretofore been provided.

The system under which the county insane are now cared for is lamentably defective, inasmuch as the only authority legally qualified to make these institutions what they ought to be has little or no knowledge of the requirements necessary to the most modern and humane methods of providing for this class. The county delegation, upon which rests the power to appropriate money for these institutions and to fully equip them in accordance with modern methods of managing the insane, too often, in fact generally, fail to study and to understand the needs of our asylums."

One would suppose that no better opportunity than this could have been had to force the issue of State Care in New Hampshire. The report brought the whole subject vividly before the legisla-

ture as well as the people of the State. The House Committee on the New Hampshire Asylum for the Insane introduced a bill providing for an appropriation of $100,000 to erect suitable buildings for the pauper and indigent insane, in connection with the present State institution. Alas, the bill failed to pass by a large majority when it came to a vote, March 29. Thus this unfortunate and, we cannot but think, cruel inertia leaves the dependent insane of New Hampshire in the same sorrowful plight, and forty-one human lives have been sacrificed without even an attempt at atonement for the horror by a callous and niggardly legislature.

EXIT DR. DEWEY, ENTER DR. CLEVENGER—Sincere regret will be felt by the friends of Dr. Dewey, superintendent of the Illinois Eastern Hospital for the Insane at Kankakee, that the political revolution in Illinois has involved the retirement from the service of so capable, so skilful, so zealous, so honest, so humane—in a word, so thorough an officer. We know of nothing that can be said in justification of his removal and perhaps the least said with reference to this particular case the better. We confess to a sense of deep humiliation over it all. Not an alienist in the land but feels that a great wrong has been done, not so much to Dr. Dewey as to the cause which he represents. It will be especially embarrassing for the American Medico-Psychological Association to explain to the world, on the occasion of the annual meeting at Chicago next June, why the chairman of its committee of arrangements, in deference to whom Chicago was chosen as the meeting place, is no longer the superintendent of the Illinois Eastern Hospital for the Insane whom it thus sought to honor.

After fourteen years of laborious service, Dr. Dewey leaves the institution to make room for Dr. S. V. Clevenger, a neurologist of Chicago. The fact that the new superintendent is a man of recognized ability and high scientific attainments is comforting. May he sustain the reputation that his prodecessor has achieved for Kankakee. All will unite in heartily wishing Dr. Clevenger success in his great mission and in fervently hoping that when next the political wheel turns in Illinois he will not be disturbed in his work for the insane, in one of the largest charitable institutions of the world, for reasons that have absolutely nothing to do with his professional efficiency. Meanwhile, Dr. Dewey will continue to enjoy, in his retirement to private practice as an alienist

and neurologist in Chicago, the esteem of his fellows and the satisfaction of an approving conscience in surveying the magnitude of his work in behalf of the people whose service he honored for twenty-two years of his life at Elgin and Kankakee.

EDWARD C. SPITZKA, M. D.—Dr. Edward C. Spitzka, whose portrait appears as the frontispiece of this issue, was born November 10, 1852, at No. 12 Ridge Street, New York city. He is of Germano-Slavonic origin. After a collegiate education at the College of the City of New York, he began the study of medicine at the Medical Department of the University of the City of New York, from which he graduated in the year 1873. In addition he obtained an honorary degree from the St. Louis College of Physicians and Surgeons in 1883. After obtaining his first degree, he passed three years in Europe, studying chiefly at Leipsic and Vienna, where he devoted special attention to Embryology, Brain Morphology, Psychiatry and Diseases of the Eye and Ear; his principal teachers at the former university being Wagner, v. Coccius, His, Hagen, Wunderlich and Thiersch, and at the latter, Meynert, Politzer, Billroth, Bamberger, Brücke, Arlt and Schenk. He served as assistant to the chair of Embryology at the University of Vienna from 1874 to 1875. He entered into general practice in his native city in 1876, occupying among other positions that of surgeon to the out-door department of Mt. Sinai Hospital and consulting Neurologist to the North-Eastern Dispensary and St. Mark's Hospital. He obtained a considerable amount of pathological material from the private and public asylums in and near New York city. The results of the analysis of this material were embodied in an essay on the "Somatic Etiology of Insanity" which gained the prize offered by the British Medico-Psychological Association from the fund presented by the descendants of W. and S. Tuke in international competition. During the same year (1876) he obtained the prize of the American Neurological Association offered by Dr. Wm. A. Hammond for an essay on Physiological Effects of Strychnia. He has occupied the position of president of the New York Neurological Society, of the American Neurological Association, and served as Vice-President of the Section on Mental Diseases at the International Medical Congress held in Washington. He is also a member of the Society of Medical Jurisprudence.

Dr. Spitzka's labors have chiefly been in the direction of the deep anatomy of the brain,—the morbid anatomy of organic diseases of the central nervous system, and the classification of mental disorders by clinical methods which many well-meaning critics are inclined to deem over-refined.

He published a text-book on "Insanity" in 1883 which has been succeeded by two editions of the same. He is the author of the articles on "Chronic Spinal Diseases" and "Cerebral Abscess" in Pepper's "System of Medicine by American Medical Authors," also of "Brain Histology" in Wood's "Reference Handbook."

Among his original discoveries may be mentioned the interoptic lobes of the iguana, the identification of the hitherto unrecognized post-optic lobes in birds and reptiles, of the spinal course of the cortex-lemniscus in man, of the auditory tract in the cetacea, and of the superficial decussation of the pyramids in the pteropus.

Dr. Spitzka has for the last fifteen years limited his professional work to the specialty of nervous and mental diseases. He has been frequently called as a medical witness in cases where the mental state of a prisoner in a criminal proceeding, or of a testator in civil proceedings was questionable, also in several well-known cases of alleged spinal injury.

Dr. Spitzka was married in 1875 to Catherine Wacek, in the city of Vienna.

Hudson River State Hospital.—Dr. Joseph M. Cleaveland has severed his connection with the Hudson River State Hospital, Poughkeepsie, N. Y., after an official service of twenty-seven years. He had been identified with the institution from its inception, having been appointed in 1866, when first assistant physician at Utica, one of the commissioners to select a site. He superintended the construction of the hospital and became its first medical superintendent.

Dr. Cleaveland, we regret to state, has long been in indifferent health and strength, on which account he tendered his resignation over a year ago. However, no formal action was taken by the Board with reference to his resignation at that time.

The trustees have now appointed, as Dr. Cleaveland's successor, Dr. Charles W. Pilgrim, superintendent of the Willard State Hospital, who will report for duty as soon as the new incumbent at Willard shall have been chosen.

The business affairs of the Hudson River State Hospital have recently been the subject of a joint investigation by three departments of the State government, namely, the State Commission in Lunacy, the Attorney-General's Office and the Comptroller's Office. Investigation was demanded by the Board of Trustees with the object of refuting the charge of extravagant management. It has revealed lax business methods and will lead to immediate reforms of administration, more particularly as regards the purchase of supplies. It is gratuitous to add that the personal integrity of the venerable superintendent remains unimpeached because unimpeachable. May he long enjoy the honorable repose to which his long service to the State entitles him!

Hon. Wm. P. Letchworth, for so many years a member of the State Board of Charities, has been honored by the Board of Regents with the degree of L. L. D. It is a distinction worthily bestowed.

Dr. Stephen Smith, formerly State Commissioner in Lunacy, has been appointed a member of the State Board of Charities by Governor Flower. Dr. Smith had already rendered the State distinguished service in that capacity, having been a member of the Board prior to his appointment as Commissioner in Lunacy.

Fire at College Hill Sanitarium.—Still another fire! As the Journal goes to press, we learn that on April 6th a disastrous fire, imperilling the lives of two hundred patients and causing a loss of from one hundred thousand to one hundred and fifty thousand dollars, occurred at the well-known private asylum at College Hill near Cincinnati, whose superintendent is Dr. Orpheus Everts. A hot soldering iron was permitted to ignite the roof, through the carelessness of a tinner, and the flames quickly got beyond control of the water works of the institution as well as those of the village of College Hill. According to the press accounts, "the insane shrieked and tore their clothing,"—the usual newspaper accompaniment of such conflagrations—but, happily, no lives were lost. The main building was entirely destroyed.

CORRESPONDENCE.

SHOULD THE INSANE BE DECEIVED?

The United States Government has established an Asylum for the Insane, on the banks of the Potomac, opposite Washington. St. Elizabeth, as the asylum is called, is not a new institution, but has been in existence some years. It is a substantial embattlemented structure, which looks down upon the beautiful "city of magnificent distances" from a high and commanding hill on the Maryland shore, just opposite the confluence of the Eastern Branch and the Potomac. Altogether, the view from the windows of the hospital is superb, queenly Washington lying out like a picturesque panorama, or a delicious dream, upon the opposite shore—the monotony of the dark tones of the dwellings broken by the agreeable glint of the white marble of the public buildings. In fact, so far as natural charms are concerned, a more superb location could hardly be found.

Although a Government institution, the indigent insane of the District of Columbia are admitted at the request of the Board of Commissioners, which superintends our municipal government—at least, what Congress leaves to us of our municipal government.

Not long since, I had occasion to consign to this institution a poor unfortunate woman afflicted with dementia. She had been known as "flighty," to her relatives, for some years past, but beneath the burden of great domestic trouble, worry, and grief, the poor, weak mind succumbed. She was not usually violent, except under the stress of great mental or emotional excitement. Of late, however, she harbored a belief that an attempt had been made upon her life by thrusting a knife into the brain through the external ear. Under the influence of these suspicions she grew guarded, treacherous, and vindictive—prowling through the house at night, firing the bed and bedding, and even the house itself. Hence, although not frequently violent, she was yet quite dangerous, and in need of both restraint and more or less confinement. So suspicious was she that in order to get her to the asylum we had to practice deceit—ostensibly carrying her for a drive into the country.

At the hospital we were met by a member of the medical staff

of the institution. He rather bluntly resented our use of deceit in conveying her, holding that they wished to gain the love and confidence of all patients, but that, in such a case as ours, the staff of the institution was held by the patient as a party to the trick. This, of course, sounds very rational and true—but has any one ever heard of a lunatic voluntarily consigning himself to an asylum? Is it not to them and their conceptions a tomb for both the living body and the dead or impaired mental powers? Do they voluntarily accept and welcome such a prospect? Such, at least, has not been our experience—to them it has the signification of a living death against which even their impaired mental faculties all rebel. Hence, we are thrown upon the necessity of using one of two means at our command—force or deceit. If force be used, the whole mental and physical nature of the patient is aroused to rebellion and a state thereby produced which surely can be little else than prejudicial to the patient's well being. In this condition hatred will be vented upon any person who happens to come in the unfortunate person's way. And if at last the force is successful in placing the patient in the place of detention, will he or she not blame equally the force which brings and the force which restrains? Is it not better to choose the lesser of two evils and practice deceit upon the patient? It is surely open to fewer objections than the use of physical force—at least, such has been our experience.

Shall we take a step in retrogression in the treatment of the insane, and resort to the unnecessary force, or the flagellations, of a century ago?

CHARLES MILTON BUCHANAN, M. D.

217 D St., N. W., Washington, D. C.

[We fear that the tendency of hospital experience is to make the superintendent opinionated, and perhaps the chief value of Dr. Buchanan's communication is to be found in this, that it enables these superintendents to see themselves as others see them in their efforts to inculcate truthfulness in dealing with the insane, for we do not consider the position of Dr. Godding in any way an exceptional one on this matter; St. Elizabeth simply stands as an exponent of the hospital side of the question. That it is common for the insane man to reach the asylum ward through

the portals of an imaginary hotel we all know, but we have hitherto supposed this was due to the moral cowardice of the friends and have wholly failed to recognize the therapeutic value of deceit in the treatment of the insane. Here is a new view of the matter, and being put forward by a medical man we are bound to consider it. Says Dr. Buchanan, Will you practice deceit on your insane patient whom you are obliged to consign to the hospital, or will you take a step in retrogression in the treatment of the insane and resort to the unnecessary force, or the flagellation of a century ago? If you are wise you will do neither. In the District of Columbia, where the case in point occurred, we believe the process of commitment is a legal one, and, if thought advisable for any reason, the papers can be placed in the hands of the police who have no occasion for deceit or the use of unnecessary force but quietly take the patient to the hospital as a person requiring treatment and detention. The processes of the law are judicial and irresistible, and this is often the best way for the officer of the hospital who receives as well as for the patient needing the care. The physician meeting his patient after his discharge from the institution some months later will not then be embarrassed by the question, Why did you find it neccssary to lie to me when accompanying me to the hospital?

Still, the methods of Ananias, despite the unfortunate occurrence when they were first introduced, have been popular with certain classes in all ages, and it is not to be wondered at that the management of the insane should seem to offer a tempting field for the exercise of those methods to one not thoroughly informed on the subject.—Eds.]

OBITUARY.

BENJAMIN BALL.*

France loses in the death of Professor Ball one of her most brilliant alienists. He was born at Naples, of English parents, April 20, 1833. He died in Paris, February 23, 1893.

After a distinguished career at the lycée Bonaparte (now Condorcet), he matriculated at the Faculty of Medicine of Paris. In 1855, he became an *interne des hôpitaux;* in 1862, he obtained his doctorate; in 1866, he became *agrégé* of the Faculty and in 1870, he was appointed *médecin des hôpitaux*, after the usual competitive examination. As *agrégé* he was frequently called upon to supply the chair of Clinical Medicine then occupied by Professor Béhier, on which occasions both the form and matter of his lectures commanded much admiration.

On the advice of Lasègue he devoted himself exclusively to mental medicine in 1875. In 1877, he became professor of Psychiatry, but, owing to administrative complications, he was unable to give his first lecture at the St. Anne Asylum until November, 1879.

He was a brilliant instructor and attracted large audiences, whom he held spellbound by the charm of his diction and the lucidity of his exposition. His *Leçons sur les maladies mentales* attests these characteristics. This work has been aptly compared to Trousseau's *Clinique Médicale.* Both are lasting because they are instinct with life, have literary merit and constitute a clear and concise summary of the actual state of science at the period.

He was a keen and sagacious observer. The pages of the *Annales Médico-psychologiques* contain numerous articles from his pen, as well as his own journal, *l'Encéphale* (1881-89), edited jointly with M. J. Luys. Among his contributions may be mentioned the following: Claustrophia; Functional Cerebral Ischæmia; Intellectual Impulses; Cerebral Torpor; The Families of the Insane; Epilepsy with Consciousness; Erotic Insanity and Morphinomania.

Dr. Ball was a man of great general culture and of high character. During an illness extending over several years, he showed great stoicism under cruel suffering, happily preserving intact his fine mind until the end. He leaves a numerous family.

---

* For the facts contained in this notice we are indebted to the sympathetic tribute of Dr. A. Ritti, in the *Annales Médico-psychologiques*, March-April, 1893. The reader may also refer to a letter by Dr. Andrews, "Three Parisian Savants," published in the JOURNAL OF INSANITY, July, 1889, containing the account of his interesting interview with the deceased.

OFFICIAL NOTICES, ETC.

COPY OF LAW PROVIDING FOR SUPPORT OF INSANE UNDER STATE CARE.

CHAP. 214.

AN ACT to appropriate money for the care, medical treatment, clothing, support and transportation to state hospitals of the insane poor, under the provisions of chapter one hundred and twenty-six of the laws of eighteen hundred and ninety.

APPROVED by the Governor March 25, 1893. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. There shall be imposed for the fiscal year beginning on the first day of October, eighteen hundred and ninety-three, on each dollar of taxable real and personal property of this state for the care, medical treatment, maintenance and transportation of the insane poor to state hospitals, the payment of officers' salaries, the payment of employés' wages and ordinary and incidental repairs in state hospitals, a tax of one-third of a mill, to be assessed, levied and collected by the annual assessment and collection of taxes for that year and paid by the several county treasurers into the treasury of this state to be held by the treasurer for application to the purposes herein specified. Of the money hereby appropriated no money shall be paid except in the manner hereinafter provided.

§ 2. The medical superintendent of each of the state hospitals shall, on or before the fifteen day of each month, cause to be prepared by the steward thereof, duplicate estimates in minute detail of the expenses required for the hospital of which he is such superintendent, countersign and submit one of such duplicates to the state commission in lunacy, and retain the other. The state commission in lunacy may revise said estimate either as to quantity of supplies or estimated cost thereof, and certify that it has carefully examined the same and that the articles contained in said estimate as revised by it are actually required for the use of the hospital, and shall thereupon present the said estimate and certificate to the comptroller. After the estimate has been approved or revised by the commission, the comptroller shall authorize the board of managers to make drafts on the comptroller as the money may be required for the purposes mentioned in the first section, which drafts shall be paid on the warrant of the comptroller. In all such estimates there shall be a sum named, not to exceeed one thousand dollars, as a contingent fund, for which no minute detailed statement need be made. The board of managers shall require their treasurer to give a bond, with sureties to be approved by the county judge of the county or a justice of the supreme court

of the judicial district in which such hospital is situated in a sum to be named by the comptroller. The superintendents of each of the said institutions or their representatives shall meet at least once in every month at a day to be appointed by the commission in lunacy at the office of the commission at Albany to consult with said commission with reference to matters relating to the care and maintenance of the state hospitals and particularly with reference to the purchase of supplies for the use of said hospitals. And where in the judgment of the board of any state hospital questions have arisen requiring special examinations some member of said board may be designated by it to attend said meeting.

§ 3. The treasurer of each of such hospitals shall be custodian of all moneys received from the comptroller, keep an accurate account thereof and only pay out such money on vouchers approved by the executive committee of the board of managers. He shall receive all moneys for the care of private patients and other sources of revenue of the hospital, and deposit all such moneys in a bank designated by the comptroller, and shall send to the comptroller and to the commission, a statement showing the amount so received and deposited and from whom and for what received and the dates on which such deposits were made. Such statement of deposit shall be certified by the proper officer of the bank receiving such deposit or deposits. The treasurer shall verify by his affidavit that the sum so deposited is all the money received by him from any source of hospital income up to the time of the last deposit appearing on such statement. Any bank in which such deposit shall be made shall before receiving such deposit file a bond with the comptroller of the state for his approval for such sum as he may deem necessary.

§ 4. The treasurer of each state hospital shall on or before the fifth day of each month make to the comptroller and to the commission a full and perfect statement of all the receipts and expenditures, specifying the items thereof for such hospital, for the last preceding month, which shall be accompanied by the necessary vouchers regularly rendered according to their respective dates, with some short designation thereon of the consideration of payment evidenced by the vouchers and the amount of the vouchers carried out in figures. If any voucher or vouchers are found to be objectionable, the comptroller shall enter his dissent on the particular voucher, and return it to the treasurer furnishing the same, who shall cause it to be presented to the board of managers for the correction and immediately return such voucher to the comptroller. Every such statement shall be verified by the affidavit of the treasurer thereunto annexed as follows: I,..... .....treasurer of the.....state hospital, do solemnly swear that I have deposited in the bank designated by law for such purpose all the moneys received by me on account of the hospital during the last month; and I do further swear that the foregoing is a true abstract of all the moneys received and expenditures made by me or under my direction as said treasurer during the month ending on the..... day of.....18... The affidavit of the steward shall likewise be appended thereto to the effect that the goods and other articles therein specified were purchased and received by him or under his direction at the hospital,

and that the goods were purchased at a fair cash market price, and paid for in cash, and that neither he nor any person in his behalf had any pecuniary or other interest in the articles purchased; that he received no pecuniary or other benefit therefrom in the way of commissions, percentage, deductions or presents, or in any other manner, whatever, directly or indirectly, nor any promises of future payments, presents or benefits, or to any persons for him, either directly or indirectly; that the articles contained in such bill were received at the hospital; that they conformed in all respects to the invoiced goods received and ordered by him, both in quality and quantity.

§ 5. The bills for the necessary and reasonable expenses incurred in the transportation of the insane poor to state hospitals, including services of women attendants for women patients, after such bills have been approved by the state commission in lunacy, shall be paid by the treasurer of the state on the warrant of the comptroller.

§ 6. The state commission in lunacy is hereby authorized and directed to return any such inmates of state hospitals supported by the state as may be found to have no legal residence within the state to the countries or states to which they belong, and is authorized and directed to expend so much of the appropriation made by this act as may be necessary for the purpose, subject to the approval of the comptroller.

§ 7. The state commission in lunacy may appoint two agents, whose duty it shall be to secure from relatives and friends who may be liable therefor or who may be willing to assume the cost of support of any such inmates of state hospitals as are being supported by the state, reinbursement in whole or in part of the moneys thus expended. The compensation of each of said agents shall not exceed one thousand dollars per year and the necessary traveling and other incidental expenses incurred by him, to be approved by the comptroller.

§ 8. This act shall take effect on the first day of October, eighteen hundred and ninety-three.

STATE OF NEW YORK—EXECUTIVE CHAMBER,

ALBANY, March 25, 1893.

Memorandum filed with Assembly Bill No. 160, entitled "An Act to Appropriate Money for the Care, Medical Treatment, Clothing, Support and Transportation to State Hospitals of the Insane Poor, Under the Provisions of Chapter One Hundred and Twenty-Six of the Laws of Eighteen Hundred and Ninety. Approved.

This bill marks an epoch in an important matter of State policy. It is the culmination of the agitation which has gone on in this State during many years for the State care of the indigent insane. The so-called State Care Act of 1890 prescribed that when accommodations in State hospitals should be provided for all of the insane poor, the cost of clothing, maintenance, care, treatment, salaries of officers and employés and transportation of the insane should cease to be a charge upon the counties of the State and should become a direct charge upon its revenues from funds to be specifically raised for that purpose. In December last the certificate required by law

was made that accommodations would be in readiness by the first of October, 1893, and this bill provides the necessary tax and appropriation for carrying the State Care Act into effect.

Heretofore each county has boarded its poor insane in the State hospitals at rates which, for many years, were arbitrarily fixed by each local board of managers, but which subsequently were made uniform throughout the State by the Commission in Lunacy. The amounts of these board bills were required to be raised each year by the board of supervisors of each county, and the money was turned into the hospital treasury. The counties will now be relieved from local taxation for this purpose. The tax of one-third of a mill, imposed by this bill, will yield in round numbers $1,350,000, which, together with the sum raised from the patients, whose support is paid by relatives and friends, and the sum received from miscellaneous sources, will amply provide for the expenses of the State hospitals for the fiscal year beginning with the first day of October, 1893. So long as New York and Kings counties refuse to avail themselves of the privileges of State care the saving to the remaining counties will average more than fifty per cent.

In order that the people may see for themselves just how this redistribution of taxation affects the various counties, I make no excuse for inserting here a table showing the relative cost to each county under the old county care system and under the new State care system. This table is as follows:

Counties.	Cost by County Tax.	Cost by State Tax.	Gain.	Loss.
Albany	$84,500 00	$30,076 00	$54,424 00	
Allegany	12,844 00	4,745 00	8,099 00	
Broome	21,111 00	9,192 00	11,919 00	
Cattaraugus	13,013 00	5,217 00	7,796 00	
Cayuga	26,181 00	10,066 00	16,115 00	
Chautauqua	19,128 00	9,137 00	9,991 00	
Chemung	20,773 00	7,040 00	13,733 00	
Chenango	15,027 00	5,458 00	9,569 00	
Clinton	13,168 00	2,603 00	10,565 00	
Columbia	20,266 00	9,193 00	11,073 00	
Cortland	8,760 00	3,348 00	5,412 00	
Delaware	16,210 00	4,395 00	11,815 00	
Dutchess	42,898 00	14,735 00	28,163 00	
Erie	109,977 00	68,103 00	41,874 00	
Essex	7,943 00	4,530 00	3,413 00	
Franklin	8,943 00	2,696 00	6,247 00	
Fulton	14,168 00	3,658 00	10,510 00	
Genesee	6,253 00	6,999 00	.....	$746 00
Greene	12,464 00	4,281 00	8,183 00	
Hamilton	1,014 00	435 00	579 00	
Herkimer	11,295 00	6,844 00	4,451 00	
Jefferson	16,534 00	8,716 00	7,818 00	
Kings	.....	154,046 00	.....	154,046 00
Lewis	11,478 00	2,650 00	8,828 00	
Livingston	13,999 00	8,785 00	5,214 00	

Counties.	Cost by County Tax.	Cost by State Tax.	Gain.	Loss.
Madison	$15,858 00	$ 6,468 00	$ 9,390 00	
Monroe	80,107 00	40,351 00	39,756 00	
Montgomery	19,083 00	8,249 00	10,834 00	
New York	.....	596,288 00	.....	$596,288 00
Niagara	23,660 00	9,628 00	14,032 00	
Oneida	76,050 00	17,539 00	58,511 00	
Onondaga	49,743 00	24,305 00	25,438 00	
Ontario	19,942 00	9,696 00	10,246 00	
Orange	34,462 00	14,624 00	19,838 00	
Orleans	5,408 00	4,944 00	464 00	
Oswego	25,012 00	7,907 00	17,105 00	
Otsego	14,520 00	6,968 00	7,552 00	
Putnam	4,887 00	2,325 00	2,562 00	
Queens	50,644 00	20,461 00	30,183 00	
Rensselaer	64,347 00	21,073 00	43,274 00	
Richmond	15,589 00	4,593 00	10,996 00	
Rockland	10,802 00	4,433 00	6,369 00	
St. Lawrence	19,252 00	9,052 00	10,200 00	
Saratoga	21,449 00	7,842 00	13,607 00	
Schenectady	10,802 00	4,504 00	6,298 00	
Schoharie	9,802 00	3,458 00	6,344 00	
Schuyler	8,943 00	2,219 00	6,724 00	
Seneca	15,351 00	4,976 00	10,375 00	
Steuben	27,519 00	8,795 00	18,724 00	
Suffolk	23,970 00	6,570 00	17,400 00	
Sullivan	11,309 00	1,750 00	9,559 00	
Tioga	11,309 00	3,969 00	7,340 00	
Tompkins	12,830 00	4,241 00	8,589 00	
Ulster	37,152 00	8,516 00	28,636 00	
Warren	8,605 00	2,514 00	6,091 00	
Washington	11,478 00	6,218 00	5,260 00	
Wayne	14,337 00	8,073 00	6,264 00	
Westchester	59,770 00	31,953 00	27,817 00	
Wyoming	3,887 00	5,240 00	.....	1,353 00
Yates	9,957 00	3,867 00	6,090 00	

As I said in my message to the Legislature at the beginning of the present session, "the great danger of this assumption of responsibility and expense by the State is maladministration. Corruption, extravagance and the improper injection of politics into hospital management will be constant foes, which, if not combated and overcome, will bring reproach upon the State." With a view to establishing abundant safeguards around the expenditure of this vast sum of money I recommended legislative provision compelling the purchase of all supplies on advance monthly estimates which should have the scrutiny of the State Commission in Lunacy. This suggestion, I am pleased to note, the Legislature has incorporated in the bill, besides imposing additional safeguards to promote economy of administra-

tion. The people are to be congratulated that the assumption of this great responsibility by the State has thus been placed upon a business-like and economical basis. The revelations of the recent investigation into the affairs of the Hudson River State Hospital at Poughkeepsie have demonstrated, if demonstration were needed, the necessity of maintaining the strictest system of financial administration. Under the provisions of this bill there can exist no purchases of supplies at a higher cost than the market values, and competition will prevail against favoritism and incompetent financial management. The superintendents of the various hospitals will meet each month with the Commission in Lunacy for an exchange of views and with the purpose of promoting uniformity in the purchase of supplies. These safeguards, inciting and insuring economical methods, are vital to the permanence of the system of State care of the insane.

ROSWELL P. FLOWER.